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Integration of Traditional Filipino Games in PATHFit and Its Influence on Student Outcomes: Basis for An Enhancement Plan

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ABSTRACT: This study examined the integration of traditional Filipino games in PATHFit and its influence on student outcomes at Batangas State University TNEU JPLPC–Malvar as basis for an enhancement plan. Specifically, it determined the profile of the 368 PATHFit students in terms of age, sex, year level, and college/program; assessed the extent of integration of traditional Filipino games in terms of frequency of implementation, variety of games introduced, instructional strategies used, student participation during activities, and alignment with course learning outcomes; and determined the level of student outcomes in terms of physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. The study also examined the significant differences in the extent of integration and in student outcomes when respondents were grouped according to their profile variables, and the significant relationship between the extent of integration and student outcomes. Descriptive statistics, independent samples t-test, one-way analysis of variance (ANOVA), and Pearson correlation analysis were employed to analyze the gathered data. The findings showed that the respondents were predominantly 18–19 years old (65.5%), male (55.4%), second-year students (48.9%), and enrolled in Information Technology/Computing programs (56.0%). The integration of traditional Filipino games in PATHFit was generally assessed as Integrated in terms of frequency of implementation (M = 3.17) and variety of games introduced (M = 3.20), while instructional strategies (M = 3.36), student participation during activities (M = 3.31), and alignment with course learning outcomes (M = 3.37) were assessed as Highly Integrated. Student outcomes were likewise assessed at a Strongly Agree level, with physical engagement (M = 3.36), cultural appreciation (M = 3.38), motivation and participation (M = 3.32), and social interaction and teamwork (M = 3.35). The t-test and ANOVA results indicated that age and year level showed significant differences in frequency of implementation and variety of games introduced, while sex and college/program showed no significant differences in any dimension of integration. In terms of student outcomes, age showed significant differences in all four dimensions, year level showed significant differences in physical engagement and cultural appreciation, and sex and college/program showed no significant differences. Most importantly, all dimensions of the integration of traditional Filipino games demonstrated significant positive relationships with all student outcome dimensions, with correlation coefficients ranging from $r = .707$ to $r = .870$, $p < .001$. The strongest relationship was between alignment with course learning outcomes and cultural appreciation ($r = .870$), while the relationship between alignment with course learning outcomes and social interaction and teamwork was also strong ($r = .861$). Based on the findings, the study concludes that the meaningful and structured integration of traditional Filipino games in PATHFit is associated with favorable student outcomes, particularly in physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. An enhancement plan is therefore proposed to strengthen the systematic implementation, variety, instructional delivery, student participation, and learning-outcome alignment of traditional Filipino games in PATHFit.

KEYWORDS: traditional games, Filipino traditional games, PATHFit, student outcomes, physical engagement, cultural appreciation, student participation, social interaction, teamwork, physical education

I. INTRODUCTION

Physical education in higher education institutions plays a significant role in promoting lifelong physical activity, holistic wellness, and psychosocial development among students. In the Philippine context, Physical Activity Toward Health and Fitness (PATHFit) is institutionalized under Commission on Higher Education Memorandum Order No. 39, series of 2021, as part of the revised General Education curriculum. PATHFit is designed to cultivate health-related fitness, movement competence, and values formation among tertiary students (Commission on Higher Education [CHED], 2021). Beyond improving physical conditioning, the

course aims to enhance students' physical engagement, motivation and participation, social interaction and teamwork, and appreciation of meaningful movement experiences that contribute to holistic student development.

Traditional Filipino games, commonly known as Laro ng Lahi, are indigenous physical activities that promote agility, coordination, cooperation, communication, and active participation. These games embody Filipino cultural values such as bayanihan, resilience, fairness, discipline, and respect. As culturally grounded physical activities, traditional Filipino games provide opportunities for learners to experience physical education in ways that are socially meaningful and culturally relevant. Research suggests that indigenous games function as culturally responsive pedagogical tools that connect learners' cultural identity with structured physical education experiences (Wrench & Garrett, 2021). When integrated into formal instruction, culturally grounded activities provide meaningful learning experiences that extend beyond physical performance and contribute to students' social, emotional, and cultural development.

In contemporary physical education instruction, culturally responsive pedagogy has gained increasing importance in promoting inclusive, student-centered, and meaningful learning experiences. Culturally responsive pedagogy emphasizes the integration of learners' cultural backgrounds, traditions, and lived experiences into instructional practices to strengthen engagement and participation. In physical education settings, incorporating traditional Filipino games allows students to connect classroom activities with their cultural heritage, making learning experiences more relevant and enjoyable compared with conventional fitness drills and repetitive physical activities commonly used in PATHFit classes. Through collaborative and game-based participation, students are encouraged to become more actively involved in class activities while simultaneously developing appreciation for Filipino culture and identity.

Contemporary scholarship further emphasizes that culturally responsive pedagogy strengthens student engagement by embedding culturally meaningful content within instruction (Wrench & Garrett, 2021). In physical education settings, culturally grounded activities have been associated with improved motivation, active participation, and deeper involvement in learning tasks. From a motivational perspective, Self-Determination Theory posits that students demonstrate higher intrinsic motivation when learning environments support their psychological needs for autonomy, competence, and relatedness (Ryan et al., 2021). Traditional Filipino games provide opportunities for students to exercise autonomy through active participation, develop competence through skill-based movement activities, and strengthen relatedness through cooperative gameplay and peer interaction. Empirical evidence indicates that when these psychological needs are satisfied in physical education contexts, students exhibit stronger behavioral engagement and greater intention to remain physically active (Guo et al., 2025; Llanos-Muñoz et al., 2023).

Student outcomes in physical education encompass multidimensional constructs, including physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. Physical engagement refers to students' active involvement and sustained participation during physical activities, while cultural appreciation pertains to recognizing and valuing Filipino cultural heritage through meaningful learning experiences. Motivation and participation reflect students' willingness and enthusiasm to engage in PATHFit activities, whereas social interaction and teamwork involve cooperation, communication, and collaborative participation during group activities. These outcomes are considered essential indicators of meaningful and holistic learning in physical education. Engagement has been identified as a critical determinant of sustained involvement in learning and physical activity programs (Guo et al., 2025). Furthermore, cooperative and culturally grounded physical activities foster teamwork and positive peer interaction, contributing to broader psychosocial development among learners.

The integration of traditional Filipino games in higher education physical education programs also contributes to the preservation and promotion of Filipino cultural heritage. As modernization and technological advancements continue to influence students' recreational preferences, many indigenous games are gradually becoming less visible among younger generations. Integrating traditional Filipino games into PATHFit instruction provides educational institutions with opportunities to preserve cultural traditions while simultaneously promoting active lifestyles and meaningful student engagement. Through educational integration, students become more aware of Filipino traditions and values embedded in indigenous games, thereby strengthening cultural identity and appreciation.

Moreover, the integration of culturally relevant pedagogical practices in higher education aligns with broader national and global educational priorities. The United Nations Sustainable Development Goals, particularly Goal 4 (Quality Education), emphasize inclusive and equitable quality education that promotes lifelong learning opportunities for all. Similarly, the Philippine development framework AmBisyon Natin 2040 highlights the importance of developing a culturally grounded, healthy, and globally competitive citizenry. In the context of educational reform, the Second Congressional Commission on Education (EDCOM II) emphasizes the need to strengthen curriculum relevance, learner engagement, and instructional quality in Philippine education.

Integrating traditional Filipino games into PATHFit contributes to these priorities by promoting culturally responsive, inclusive, and engaging learning environments that support holistic student development.

Despite the theoretical and empirical support for culturally responsive physical education, limited quantitative research has examined the structured integration of traditional Filipino games within PATHFit programs in Philippine higher education institutions. Existing studies commonly focus on the recreational, cultural, and developmental value of traditional games in basic education settings, while limited attention has been given to their systematic integration in tertiary-level PATHFit instruction. Furthermore, there remains insufficient empirical evidence regarding how the integration of traditional Filipino games influences student outcomes such as physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. At Batangas State University TNEU JPLPC–Malvar, no published quantitative study has systematically investigated these relationships.

Additionally, the absence of institution-based empirical evidence regarding the integration of traditional Filipino games in PATHFit limits the university's basis for strengthening culturally responsive instructional practices. Without data-driven findings, efforts to enhance the integration of traditional Filipino games may rely primarily on assumptions rather than evidence-based instructional planning. Determining the predictive influence of integration practices on selected student outcomes may therefore provide valuable insights that can guide curriculum enhancement, instructional improvement, and culturally responsive teaching practices in higher education physical education programs.

Thus, this study seeks to examine the integration of traditional Filipino games in PATHFit and determine its influence on selected student outcomes as basis for the development of an enhancement plan. Specifically, the study investigates students' perceptions and experiences regarding the extent of integration of traditional Filipino games and its relationship with physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. The proposed enhancement plan is expected to support evidence-based, culturally responsive, and student-centered instructional practices that contribute to the advancement of holistic physical education in higher education institutions.

Research Question

This study seeks to examine the integration of traditional Filipino games in Physical Activity Toward Health and Fitness (PATHFit) and determine its influence on selected student outcomes at Batangas State University TNEU JPLPC–Malvar. Specifically, it aims to assess the extent to which traditional Filipino games are incorporated into PATHFit instruction and investigate whether such integration significantly predicts students' physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. Furthermore, the study aims to determine the significant relationships among variables and serve as a basis for the development of an enhancement plan to strengthen culturally responsive instructional practices in PATHFit.

Specifically, this study seeks to answer the following research questions:

1. What is the profile of PATHFit students at Batangas State University TNEU JPLPC–Malvar in terms of:
    1.1 Age;
    1.2 Sex;
    1.3 Year Level; and
    1.4 College/Program?
2. What is the extent of integration of traditional Filipino games in PATHFit in terms of:
    2.1 Frequency of implementation;
    2.2 Variety of games introduced;
    2.3 Instructional strategies used;
    2.4 Student participation during activities; and
    2.5 Alignment with course learning outcomes?
3. What is the level of student outcomes in terms of:
    3.1 Physical engagement;
    3.2 Cultural appreciation;
    3.3 Motivation and participation; and
    3.4 Social interaction and teamwork?
4. Is there a significant difference between the students' profile variables and the extent of integration of traditional Filipino games in PATHFit?
5. Is there a significant difference between the students' profile variables and their level of outcomes?

6. Is there a significant relationship between the extent of integration of traditional Filipino games in PATHFit and the students' outcomes?
7. Based on the quantitative results, what enhancement plan can be proposed to strengthen the integration of traditional Filipino games in PATHFit?

II. SCOPE AND LIMITATION OF THE STUDY

This study focuses on examining the integration of traditional Filipino games in Physical Activity Toward Health and Fitness (PATHFit) and determining its predictive influence on selected student outcomes at Batangas State University – The National Engineering University (TNEU), JPLPC–Malvar Campus. Specifically, the study assesses the extent of integration of traditional Filipino games in terms of frequency of implementation, variety of games introduced, instructional strategies used, student participation during activities, and alignment with course learning outcomes.

The study also investigates student outcomes in terms of physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. In addition, it examines whether significant differences exist in these outcomes when students are grouped according to profile variables such as age, sex, year level, and college/program.

The respondents of the study are students enrolled in PATHFit courses at Batangas State University TNEU JPLPC–Malvar during the academic term in which the data collection is conducted. Stratified random sampling is utilized to ensure representation across identified student categories. Data are gathered using a researcher-made questionnaire validated by experts in Physical Education.

This study is limited to a quantitative descriptive–correlational research design. It does not involve experimental manipulation or intervention implementation. The study relies on self-reported data collected through survey questionnaires, which may be subject to response bias and social desirability bias.

Furthermore, the findings of the study are confined to the selected campus and may not be generalized to other higher education institutions without further validation. The proposed enhancement plan derived from the results is conceptual in nature and is not implemented or experimentally tested within the duration of the study.

Framework

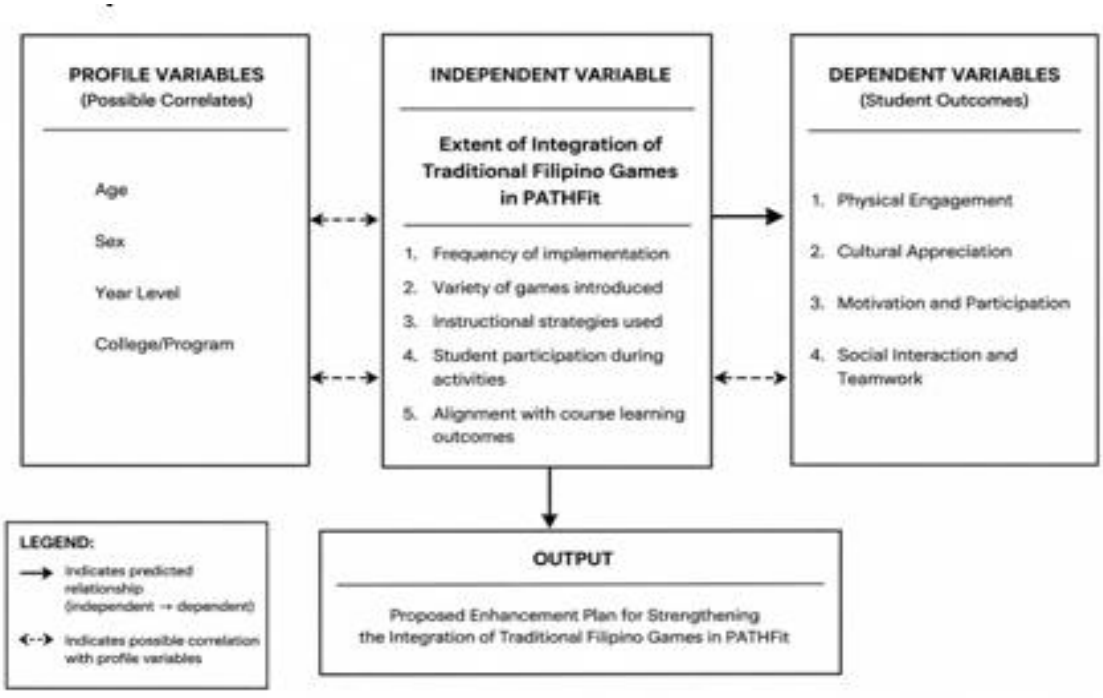


Figure 1. *Conceptual Framework of the Study*

This study is anchored on a descriptive–correlational framework that illustrates the relationship between the extent of integration of traditional Filipino games in PATHFit and selected student outcomes among PATHFit students at Batangas State University TNEU JPLPC–Malvar.

The independent variable of the study is the extent of integration of traditional Filipino games in PATHFit, which is measured in terms of frequency of implementation, variety of games introduced, instructional strategies used, student participation during activities, and alignment with course learning outcomes.

The dependent variables of the study are the selected student outcomes, namely physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. These variables represent the outcomes that may be influenced by the integration of traditional Filipino games within PATHFit instruction.

The study also considers profile variables such as age, sex, year level, and college/program as possible correlates of the extent of integration and student outcomes. These profile variables are included to determine whether significant relationships and differences exist when respondents are grouped according to their demographic characteristics.

The framework further illustrates that the study utilizes descriptive and inferential statistical procedures to examine the relationships among variables and determine whether the extent of integration of traditional Filipino games is significantly related to selected student outcomes. The findings of the study serve as the basis for the development of an evidence-based enhancement plan intended to strengthen culturally responsive and student-centered instructional practices in PATHFit.

Research Design

This study employed a quantitative descriptive–correlational research design to examine the integration of traditional Filipino games in Physical Activity Toward Health and Fitness (PATHFit) and determine its influence on selected student outcomes among PATHFit students at Batangas State University – The National Engineering University (TNEU), JPLPC–Malvar Campus.

The quantitative approach was appropriate for this study because it allowed the researcher to collect measurable and numerical data that were statistically analyzed to determine patterns, relationships, and predictive influences among the variables of the study. Through quantitative procedures, the study objectively examined the extent of integration of traditional Filipino games in PATHFit and its relationship with selected student outcomes.

The descriptive component of the design was utilized to systematically describe the profile of the respondents in terms of age, sex, year level, and college/program. It was also used to determine the extent of integration of traditional Filipino games in PATHFit instruction in terms of frequency of implementation, variety of games introduced, instructional strategies used, student participation during activities, and alignment with course learning outcomes. Furthermore, the descriptive aspect of the study assessed the level of student outcomes in terms of physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork.

The correlational component of the study was employed to examine the relationships among the variables. Specifically, the study determined whether significant relationships existed between the extent of integration of traditional Filipino games and selected student outcomes. It also examined whether significant relationships and differences existed when respondents were grouped according to profile variables such as age, sex, year level, and college/program.

In addition, the predictive aspect of the descriptive–correlational design was utilized to determine whether the extent of integration of traditional Filipino games significantly predicted students' physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. Through regression and correlational analyses, the study identified the extent to which integration practices influenced multidimensional student outcomes within PATHFit instruction.

Data were collected using a researcher-made survey questionnaire administered to PATHFit students at Batangas State University TNEU JPLPC–Malvar. The collected data were analyzed using appropriate descriptive and inferential statistical techniques to determine patterns, relationships, differences, and predictive influences among the variables examined in the study.

The use of a quantitative descriptive–correlational research design was appropriate for this study because it allowed for the systematic assessment of integration practices, determination of student outcomes, examination of relationships among variables, and identification of predictive relationships without manipulating any variables. Furthermore, the findings generated through this design provided empirical and data-driven bases for the development of an enhancement plan intended to strengthen the integration of traditional Filipino games and improve culturally responsive and student-centered instructional practices in PATHFit.

Research Instruments

The primary instrument used in this study was a researcher-made survey questionnaire designed to gather quantitative data regarding the integration of traditional Filipino games in Physical Activity Toward Health and Fitness (PATHFit) and its influence on selected student outcomes among PATHFit students at Batangas State University – The National Engineering University (TNEU), JPLPC–Malvar Campus. The construction of the questionnaire was based on the objectives of the study, the Statement of the Problem, the conceptual framework, and relevant literature and empirical studies related to culturally responsive physical

education, traditional Filipino games, student engagement, motivation, cultural appreciation, and social interaction in physical education settings. The indicators included in the instrument were derived and adapted from concepts, variables, and dimensions identified in related scholarly literature and empirical studies to ensure alignment with the independent and dependent variables investigated in the study.

The questionnaire was structured to obtain information relevant to the objectives of the study and was composed of three major parts corresponding to the variables identified in the Statement of the Problem. Part I: Profile of the Respondents gathered demographic information regarding the respondents' age, sex, year level, and college/program. The information obtained from this section was used to answer Research Question No. 1 and to determine whether significant relationships and differences existed when respondents were grouped according to profile variables. Part II: Extent of Integration of Traditional Filipino Games in PATHFit measured the independent variable of the study, specifically the extent of integration of traditional Filipino games in PATHFit instruction. The indicators in this section were aligned with Research Question No. 2 and consisted of statements describing instructional practices related to the implementation of traditional Filipino games in PATHFit classes. The dimensions measured included frequency of implementation, variety of games introduced, instructional strategies used, student participation during activities, and alignment with course learning outcomes. The responses obtained from this section determined the extent to which traditional Filipino games were integrated into PATHFit instruction. Part III: Student Outcomes measured the dependent variables of the study and was aligned with Research Question No. 3. It contained statements describing students' perceptions and experiences regarding PATHFit activities involving traditional Filipino games. Specifically, the items assessed physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. These dimensions represented the selected student outcomes examined in the study and were used to determine the influence of the integration of traditional Filipino games on multidimensional student development.

The questionnaire utilized a four-point Likert scale to measure the respondents' perceptions, experiences, and level of agreement regarding the statements presented in the instrument. A rating of 4 was interpreted as Highly Integrated/Strongly Agree, 3 as Integrated/Agree, 2 as Slightly Integrated/Disagree, and 1 as Not Integrated/Strongly Disagree. The weighted mean of the responses was used to determine the extent of integration of traditional Filipino games and the level of student outcomes.
To ensure content validity, the questionnaire underwent expert validation by specialists in Physical Education, Sports Science, and research methodology. The panel of validators evaluated the instrument in terms of clarity, relevance, coherence, appropriateness of indicators, and alignment with the objectives and variables of the study. Their comments, recommendations, and suggestions were carefully reviewed and incorporated to improve the quality, organization, and content of the questionnaire. After the validation process, the revised questionnaire underwent pilot testing among respondents who possessed characteristics similar to those of the actual participants but were not included in the final sample. The pilot testing procedure was conducted to identify ambiguities in the items and determine the appropriateness of the instrument under actual data collection conditions.

Reliability testing was subsequently conducted using Cronbach's Alpha coefficient to determine the internal consistency and psychometric quality of the instrument. A Cronbach's Alpha coefficient of 0.70 or higher was considered acceptable, indicating that the questionnaire items consistently measured the constructs of the study. Necessary revisions were incorporated for items that demonstrated low reliability to further strengthen the consistency of the instrument. Through expert validation, pilot testing, and reliability analysis, the researcher ensured that the instrument possessed acceptable psychometric quality and was appropriate for measuring the extent of integration of traditional Filipino games in PATHFit and its influence on students' physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork.

Data Collection Procedures

The data collection process began with the preparation of the necessary documents required for the conduct of the study. The researcher first secured a formal letter of permission from the appropriate authorities at Batangas State University – The National Engineering University (TNEU), JPLPC–Malvar Campus, to allow the administration of the survey questionnaire among students enrolled in the Physical Activity Toward Health and Fitness (PATHFit) courses.

Upon approval of the request, the researcher coordinated with the concerned PATHFit instructors and relevant university offices to facilitate the distribution of the survey instrument to the selected respondents. Prior to the administration of the questionnaire, the purpose of the study was explained to the respondents, and clear instructions were provided on how to accomplish the instrument.

Participation in the study was voluntary. The respondents were assured that their responses would be treated with strict confidentiality and would be used solely for academic and research purposes. Informed consent was obtained from all participants before the administration of the questionnaire.

The validated survey questionnaire was then administered to the selected respondents using stratified random sampling. The respondents were given sufficient time to read and answer each item carefully to ensure accurate and reliable responses.

After completion, the accomplished questionnaires were collected and reviewed for completeness. Questionnaires with incomplete responses were excluded from the analysis to maintain the integrity of the data.

The collected data were then organized, encoded, and prepared for statistical analysis. The encoded responses were subjected to appropriate descriptive and inferential statistical procedures to determine the extent of integration of traditional Filipino games in PATHFit and its influence on students' physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork.

The results of the data analysis served as the basis for the development of an enhancement plan aimed at strengthening the integration of traditional Filipino games in PATHFit.

III. RESULTS

This chapter presents, analyzes, and interprets the data gathered in the study based on the research questions and objectives. The findings are systematically presented, beginning with the relevant characteristics of the respondents, followed by the analysis of the variables under investigation. Appropriate statistical procedures are used to summarize and analyze the data and determine significant findings. The results provide the basis for the discussion, conclusions, recommendations, and practical output presented in the succeeding chapters.

Table 1. Distribution of the Respondents in Terms of Age

Age	Frequency	Percentage
17 years old or below	0	0.0
18 – 19 years old	241	65.5
20 – 21 years old	121	32.9
22 – 23 years old	3	0.8
24 years old or above	3	0.8
Total	368	100

Table 1 presents the age profile of the 368 PATHFit students. The largest group consists of students aged 18–19 years old, with 241 respondents (65.5%), indicating that nearly two-thirds of the participants belong to this age bracket. This is followed by students aged 20–21 years Dold, with 121 respondents (32.9%). Meanwhile, only 3 respondents (0.8%) were aged 22–23 years old and another 3 respondents (0.8%) were 24 years old or above. No respondent was 17 years old or below.

Overall, 362 respondents (98.4%) were between 18 and 21 years old, showing that the sample was overwhelmingly composed of students within this age range. This age distribution is consistent with the context of PATHFit as a physical education component in higher education, where students are generally within the late-adolescent to young-adult stage. The concentration of respondents in this age range provides a relatively consistent developmental context for interpreting the succeeding findings on student engagement, participation, cultural appreciation, and other outcomes examined in the study.

The predominance of respondents aged 18–21 also indicates that the findings primarily reflect the experiences of students within this age group. Physical activity participation and engagement during the university years are important for establishing and maintaining active lifestyle behaviors, while structured physical education programs provide opportunities to support physical, psychological, and social well-being among university students (Alhemedi et al., 2026; Wu et al., 2022).

Table 2. *Distribution of the Respondents in Terms of Sex*

Sex	Frequency	Percentage
Male	204	55.4
Female	164	44.6
Total	368	100

Table 2 presents the distribution of the 368 PATHFit students according to sex. Male respondents comprised the majority, with 204 students (55.4%), while female respondents accounted for 164 students (44.6%). Although the difference is relatively small, the distribution indicates a slightly higher representation of male students in the study.

The relatively close distribution between male and female respondents provides a useful basis for examining whether student outcomes differ according to sex. In physical education, participation and engagement are influenced by a combination of individual and instructional factors, including students' motivation, perceived competence, and learning environment (Llanos-Muñoz et al., 2023; Ryan et al., 2021). Thus, the representation of both male and female students in the sample provides an appropriate context for the succeeding analyses of their experiences and outcomes in PATHFit.

Table 3. *Distribution of the Respondents in Terms of Year Level*

Year Level	Frequency	Percentage
1st Year	102	27.7
2nd Year	180	48.9
3rd Year	74	20.1
4th Year	12	3.3
Total	**368**	**100**

Table 3 presents the distribution of the 368 PATHFit students according to year level. Second-year students constituted the largest group, with 180 respondents (48.9%), representing nearly half of the sample. This was followed by first-year students, with 102 respondents (27.7%), and third-year students, with 74 respondents (20.1%). The smallest group consisted of fourth-year students, with 12 respondents (3.3%).

Overall, 282 respondents (76.6%) were from the first and second year levels, indicating that the sample was predominantly composed of students in the earlier stages of their undergraduate studies. This distribution provides important context for interpreting the succeeding findings because students' engagement and participation in physical education may be influenced by their motivation, learning experiences, and exposure to instructional activities (Ryan et al., 2021; Suguis & Belleza, 2022).

The relatively small representation of fourth-year students should also be considered when interpreting comparisons across year levels. Nevertheless, the distribution provides representation from all four year levels, allowing the study to examine whether differences in the selected student outcomes may be associated with respondents' academic level.

Table 4. *Distribution of the Respondents in Terms of College/Program*

College/Program	Frequency	Percentage
Information Technology / Computing	206	56.0
Engineering Technology	96	26.1
Business	5	1.4
Hospitality & Tourism	10	2.7
Education	50	13.6
Health/Nutrition	1	0.3
Total	**368**	**100**

Table 4 presents the distribution of the 368 PATHFit students according to college or academic program. Information Technology/Computing had the largest representation, with 206 respondents (56.0%), accounting for more than half of the sample. This was followed by Engineering Technology, with 96 respondents (26.1%), and Education, with 50 respondents (13.6%). Hospitality and Tourism accounted for 10 respondents (2.7%), while Business had 5 respondents (1.4%). Health/Nutrition had the smallest representation, with only 1 respondent (0.3%).

Overall, 302 respondents (82.1%) were enrolled in Information Technology/Computing and Engineering Technology programs, indicating that the sample was predominantly composed of students from these two academic areas. The representation of students from several programs provides a broader academic context for examining their experiences in PATHFit. Since student engagement can be influenced by the learning environment, instructional practices, and the nature of physical education activities, considering the respondents' academic program is relevant to understanding variations in their participation and engagement (Guo et al., 2023; Wu et al., 2022).

The substantial representation of students across different programs also provides a basis for examining whether significant differences in the selected student outcomes may exist when respondents are grouped according to college or program. However, the very small number of respondents from Health/Nutrition and Business should be considered when interpreting group comparisons involving these categories.

Table 5. *Extent of Integration of Traditional Filipino Games in PATHFit in Terms of Frequency of Implementation*

	Indicators	Mean	VI
1.	Traditional Filipino games are played in PATHFit at least twice a month. (Naglalaro ng tradisyunal na larong Pilipino sa PATHFit nang hindi bababa sa dalawang beses kada buwan.)	3.15	I
2.	Traditional Filipino games are included in more than one month of the semester. (Kasama ang tradisyunal na laro sa mahigit isang buwan ng semestre.)	3.09	I
3.	Traditional Filipino games are conducted in at least four PATHFit sessions in a semester. (Isinasagawa ang tradisyunal na laro sa hindi bababa sa apat na sesyon sa isang semestre.)	3.08	I
4.	The instructor announces the schedule of traditional games before the activity day. (Inaanunsyo ng guro ang iskedyul ng tradisyunal na laro bago ang araw ng aktibidad.)	3.24	I
5.	Traditional games are used as a warm-up or main activity at least once a month. (Ginagamit ang tradisyunal na laro sa warm-up o main activity nang hindi bababa sa isang beses kada buwan.)	3.17	I
6.	Traditional games are used as part of the lesson plan (warm-up, skill, or fitness activity). (Kasama ang tradisyunal na laro sa lesson plan (warm-up, skill, o fitness activity).)	3.29	HI
7.	Traditional games appear again in later meetings, not only in one meeting. (Hindi isang beses lang; bumabalik ang tradisyunal na laro sa mga susunod na meeting.)	3.13	I
8.	When traditional games are scheduled, the activity is conducted (not cancelled without replacement). (Kapag nakaiskedyul ang tradisyunal na laro, naisasagawa ito (hindi basta nakansela nang walang kapalit).)	3.17	I
9.	When used, traditional games take at least 15 minutes of class time. (Kapag ginamit ang tradisyunal na laro, tumatagal ito ng hindi bababa sa 15 minuto sa klase.)	3.20	I
10.	Traditional games are included in both skill-focused and fitness-focused lessons. (Kasama ang tradisyunal na laro sa skill-focused at fitness-focused na aralin.)	3.23	I
	General Assessment	**3.17**	**I**

Legend: 3.25 – 4.00 Highly Integrated (HI); 2.50 – 3.24 Integrated (I); 1.75 – 2.49 Slight Integrated (SI); 1.00 – 1.74 Not Integrated (NI)

Table 5 presents the extent of integration of traditional Filipino games in PATHFit in terms of frequency of implementation. The General Assessment Mean of 3.17, interpreted as Integrated, indicates that traditional Filipino games are generally incorporated into PATHFit activities on a regular basis. This suggests that students commonly encounter traditional games as part of their physical education learning experiences.

Among the indicators, the highest mean was obtained by “Traditional games are used as part of the lesson plan (warm-up, skill, or fitness activity)”, with a mean of 3.29, interpreted as Highly Integrated. This indicates that traditional games are not merely treated as occasional recreational activities but are incorporated into different components of PATHFit instruction. Such integration is consistent with literature emphasizing that traditional games can function as meaningful pedagogical resources by combining physical activity, cultural expression, and learning within physical education settings (Lavega-Burgués et al., 2023; Wicahyani et al., 2025).

The lowest mean was recorded for “Traditional Filipino games are conducted in at least four PATHFit sessions in a semester,” with a mean of 3.08, although this remains within the Integrated category. This suggests that while traditional games are incorporated into PATHFit instruction, their implementation across a larger number of sessions may still have room for strengthening. Regular exposure to traditional games can provide students with continued opportunities for participation and engagement, particularly when such activities are meaningfully incorporated into the instructional process (Dugas & Ben Ali, 2023).

Overall, the findings indicate that traditional Filipino games are integrated into PATHFit with generally consistent implementation, particularly through their inclusion in lesson plans as warm-up, skill, or fitness activities. This pattern supports the view that culturally meaningful physical activities can enrich physical education instruction while promoting student participation and engagement (Bonato et al., 2024; Mathunjwa et al., 2025).

Table 6. *Extent of Integration of Traditional Filipino Games in PATHFit in Terms of Variety of Games Introduced*

	Indicators	Mean	VI
1.	We are introduced to at least five different traditional Filipino games in a semester. *(Nakikilala namin ang hindi bababa sa limang iba't ibang tradisyunal na laro sa isang semestre.)*	3.12	I
2.	Traditional games include both individual and team games. *(Kasama ang tradisyunal na laro na pang-isahan at pang-grupo.)*	3.27	HI
3.	The instructor introduces new games, not only repeats the same game all term. *(Nagpapakilala ang guro ng bagong laro, hindi puro lisang laro lang buong term.)*	3.27	HI
4.	The traditional game changes across sessions at least once a month. *(Nag-iiba ang tradisyunal na laro sa mga sesyon nang hindi bababa sa isang beses kada buwan.)*	3.16	I
5.	The class plays different types (tag/chase, throwing, strategy, relay) across the term. *(Naglalaro ang klase ng iba't ibang uri (habulan/tag, batuhan, strategy, relay) sa buong term.)*	3.23	I
6.	We play games with different local names or origins when these are explained. *(Naglalaro kami ng mga laro na may iba't ibang pinagmulan o tawag kapag ipinaliwanag.)*	3.20	I
7.	The class tries more than one game before choosing what to use for a lesson. *(Sinusubukan muna ng klase ang higit sa isang laro bago pumili ng gagamitin sa aralin.)*	3.11	I
8.	We are introduced to at least one traditional game most students did not know before. *(May ipinakilalang kahit isang tradisyunal na laro na dati ay hindi alam ng karamihan.)*	3.21	I
9.	Some traditional games use simple equipment (piko grid, pamato, markers), and some do not. *(May mga larong may simpleng gamit (piko grid, pamato, markers) at may mga walang gamit.)*	3.18	I
10.	When there are several games, the class rotates so everyone experiences each game. *(Kapag maraming laro, umiikot ang grupo para maranasan ng lahat ang bawat laro.)*	3.25	HI
	General Assessment	**3.20**	**I**

Legend: 3.25 – 4.00 Highly Integrated (HI), 2.50 – 3.24 Integrated (I), 1.75 – 2.49 Slight Integrated (SI), 1.00 – 1.74 Not Integrated (NI)

Table 6 presents the extent of integration of traditional Filipino games in PATHFit in terms of variety of games introduced. The General Assessment Mean of 3.20, interpreted as Integrated, indicates that a variety of traditional Filipino games is generally incorporated into PATHFit activities. This suggests that students are exposed to different game experiences rather than relying exclusively on a single traditional game throughout the course. The use of varied traditional games can provide students with diverse opportunities for participation and engagement in physical education (Azlan et al., 2021; Wicahyani et al., 2025).

The highest mean of 3.27 was obtained by two indicators: "Traditional games include both individual and team games" and "The instructor introduces new games, not only repeats the same game all term." Both were interpreted as Highly Integrated. These results indicate that instructors provide students with varied game experiences and introduce new activities during the term. Exposure to different game forms can promote varied participation experiences and help maintain students' interest in physical education activities (Azlan et al., 2021). Similarly, the use of diverse and meaningful activities may contribute to more engaging learning experiences in physical education (Bonato et al., 2024).

The indicator "When there are several games, the class rotates so everyone experiences each game" also obtained a relatively high mean of 3.25, interpreted as Highly Integrated. This suggests that when multiple traditional games are available, opportunities are provided for students to experience different activities rather than limiting participation to selected groups. Such approaches are consistent with the emphasis on inclusive and participatory physical education, where varied activities can encourage broader student involvement (Fauzi et al., 2024; Mathunjwa et al., 2025).

In contrast, the lowest mean was 3.11, obtained by the indicator "The class tries more than one game before choosing what to use for a lesson," although this remains within the Integrated category. This suggests that while multiple games are generally introduced, systematic trial or selection of several games before a lesson may be comparatively less common. Nevertheless, the overall finding of 3.20 (Integrated) indicates that variety is generally evident in the implementation of traditional Filipino games in PATHFit. This supports the use of diverse culturally meaningful activities as resources for enriching physical education instruction and student engagement (Bonato et al., 2024; Lavega-Burgués et al., 2023).

Table 7. Extent of Integration of Traditional Filipino Games in PATHFit in Terms of Instructional Strategies Used

Indicators	Mean	VI
1. The instructor explains the rules before the game starts. (Ipinaliliwanag ng guro ang patakaran bago magsimula ang laro.)	3.38	HI
2. The instructor demonstrates the game or shows a sample round. (Ipinapakita ng guro ang laro o nagpapakita ng sample na round.)	3.43	HI
3. The instructor gives step-by-step instructions (start/stop signal, scoring, penalties). (Nagbibigay ang guro ng sunod-sunod na panuto (start/stop signal, scoring, penalties).)	3.41	HI
4. The instructor assigns roles (leader, scorer, timekeeper) to guide teamwork. (Nag-aassign ang guro ng roles (leader, scorer, timekeeper) para sa teamwork.)	3.36	HI
5. The instructor gives feedback during the game (what to improve and why). (Nagbibigay ang guro ng feedback habang naglalaro (ano ang aayusin at bakit).)	3.30	HI
6. The instructor reminds the class about safety rules (spacing, no pushing, safe tagging). (Pinapaalala ng guro ang safety rules (distansya, bawal tulakan, ligtas na pag-tag).)	3.36	HI
7. The instructor adjusts rules so all students can join (shorter distance, more turns). (Inaangkop ng guro ang patakaran para makasali ang lahat (mas maikling distansya, mas maraming turn).)	3.33	HI
8. The instructor applies the same rules to everyone when calling violations. (Pare-parehong ipinapatupad ng guro ang patakaran kapag may violation.)	3.36	HI
9. After the game, the instructor asks short questions (what worked, what to improve). (Pagkatapos ng laro, nagtatanong ang guro (ano ang gumana, ano ang aayusin).)	3.27	HI
10. The instructor states the lesson goal for the game (fitness, agility, teamwork, strategy). *(Sinasabi ng guro ang layunin ng laro (fitness, agility, teamwork, strategy).)*	3.38	HI
General Assessment	**3.36**	**HI**

Legend: 3.25 – 4.00 Highly Integrated (HI), 2.50 – 3.24 Integrated (I), 1.75 – 2.49 Slight Integrated (SI), 1.00 – 1.74 Not Integrated (NI)

Table 7 presents the extent of integration of traditional Filipino games in PATHFit in terms of instructional strategies used. The General Assessment Mean of 3.36, interpreted as Highly Integrated, indicates that instructors consistently employ appropriate instructional strategies when facilitating traditional Filipino games. This suggests that the games are implemented through structured teaching practices rather than being conducted solely as informal recreational activities. Effective instructional practices and supportive teaching environments are recognized as important factors in promoting student engagement and participation in physical education (Guo et al., 2023; Wicahyani et al., 2025).

The highest mean was obtained by the indicator “The instructor demonstrates the game or shows a sample round,” with a mean of 3.43, interpreted as Highly Integrated. This indicates that demonstration is strongly practiced when introducing traditional Filipino games. Demonstrations can provide students with a concrete representation of game procedures and expected performance, helping them understand how activities are to be performed. Clear and structured instructional approaches are consistent with effective physical education teaching practices that support student understanding and active participation (Falle & Cancio, 2025; Wicahyani et al., 2025).

This was followed by “The instructor gives step-by-step instructions,” with a mean of 3.41, and “The instructor explains the rules before the game starts” and “The instructor states the lesson goal for the game,” both with means of 3.38. These findings indicate that instructors generally provide students with clear procedures and establish the purpose of the activity before participation. Such practices can help create organized learning environments in which students understand expectations and can participate more confidently and purposefully (Guo et al., 2023; Wicahyani et al., 2025).

The relatively high ratings for assigning roles, reinforcing safety, adjusting rules for participation, and applying rules consistently, with means ranging from 3.33 to 3.36, further indicate that instructional strategies emphasize both organization and inclusive participation. Adapting activities to accommodate learners and providing opportunities for cooperative participation are consistent with student-centered and supportive approaches in physical education (Bonato et al., 2024; Guo et al., 2023). Traditional games are particularly suitable for such approaches because they can be adapted to different learning conditions while retaining their cultural and physical activity value (Mathunjwa et al., 2025).

The lowest mean was obtained by “After the game, the instructor asks short questions (what worked, what to improve),” with a mean of 3.27, although this remains within the Highly Integrated category. This indicates that post-activity reflection is practiced,

but comparatively less frequently than demonstration, step-by-step instruction, and other instructional strategies. Reflective questioning can provide opportunities for students to process their experiences and identify areas for improvement, thereby extending learning beyond the actual gameplay (Wicahyani et al., 2025).

Overall, the 3.36 General Assessment Mean indicates that instructional strategies used in integrating traditional Filipino games are Highly Integrated in PATHFit. The findings suggest that instructors provide structured guidance, demonstrations, feedback, safety reminders, inclusive adjustments, and clear learning objectives when implementing traditional games. This is consistent with literature emphasizing the importance of appropriate instructional design and teacher support in promoting meaningful participation and engagement in physical education (Guo et al., 2023; Wicahyani et al., 2025).

Table 8. *Extent of Integration of Traditional Filipino Games in PATHFit in Terms of Student Participation During Activities*

Indicators	Mean	VI
1. Most students join the game when it is their turn (not staying on the side). *(Karamihan ay sumasali kapag turn na nila (hindi lang nakatabi).)*	3.29	HI
2. Students join even if the game is new after the rules are explained. *(Sumasali ang mga estudyante kahit bago ang laro matapos ipaliwanag ang rules.)*	3.31	HI
3. During traditional games, students are moving most of the time (not standing for long). *(Sa tradisyunal na laro, kadalasan ay gumagalaw ang mga estudyante (hindi matagal na nakatayo).)*	3.30	HI
4. Students show active effort (running, chasing, defending) during play. *(Nagpapakita ng aktibong effort ang mga estudyante (tumatakbo, humahabol, nagde-defense).)*	3.31	HI
5. Students take turns and follow team roles during the game. *(Nagsasalitan at sumusunod sa roles ang mga estudyante sa laro.)*	3.30	HI
6. Students encourage classmates to join and avoid teasing those who are slower. *(Hinahikayat ang kaklase na sumali at iniiwasan ang panunukso sa mas mabagal.)*	3.33	HI
7. Students follow the start/stop signal and stop immediately when told. *(Sinusunod ang start/stop signal at humihinto agad kapag pinahinto.)*	3.33	HI
8. Students rotate so everyone gets equal chances (roles/positions/turns). *(Umiikot ang grupo para pantay ang pagkakataon (roles/posisyon/turn).)*	3.34	HI
9. When conflicts happen, students follow the teacher's decision and continue. *(Kapag may pagtatalo, sinusunod ang desisyon ng guro at nagpapatuloy.)*	3.30	HI
10. Students help set up and clean up simple materials (markers, cones, lines). *(Tumulong ang mga estudyante sa pag-set up at pagligpit ng gamit (markers, cones, guhit).)*	3.31	HI
General Assessment	**3.31**	**HI**

Legend: 3.25 – 4.00 Highly Integrated (HI), 2.50 – 3.24 Integrated (I), 1.75 – 2.49 Slight Integrated (SI), 1.00 – 1.74 Not Integrated (NI)

Table 8 presents the extent of integration of traditional Filipino games in PATHFit in terms of student participation during activities. The General Assessment Mean of 3.31, interpreted as Highly Integrated, indicates that students generally demonstrate active and cooperative participation when traditional Filipino games are incorporated into PATHFit activities. This suggests that the implementation of traditional games provides students with opportunities to participate physically, follow activity procedures, cooperate with classmates, and remain involved during gameplay. Research has similarly indicated that traditional game-based activities can increase students' active participation in physical education (Fauzi et al., 2024).

The highest mean of 3.34 was obtained by the indicator "Students rotate so everyone gets equal chances (roles/positions/turns)," interpreted as Highly Integrated. This indicates that equitable opportunities for participation are strongly evident during traditional game activities. Providing students with opportunities to take different roles and positions may encourage broader involvement and promote cooperative participation. Traditional games have been recognized as activities that can foster social interaction, cooperation, and shared participation among learners (Çinar & Hassani, 2026; Lavega-Burgués et al., 2023).

The indicators "Students encourage classmates to join and avoid teasing those who are slower" and "Students follow the start/stop signal and stop immediately when told" both obtained a mean of 3.33, also interpreted as Highly Integrated. These results suggest that participation extends beyond physical involvement and includes supportive and responsible behaviors during gameplay. A supportive physical education environment can strengthen students' engagement and willingness to participate, particularly when students experience positive interactions with teachers and peers (Guo et al., 2023).

The lowest mean was 3.29, obtained by the indicator "Most students join the game when it is their turn (not staying on the side)," although it remained within the Highly Integrated category. This indicates that students generally participate when opportunities are provided, while a small degree of non-participation may still occur. Since active participation is central to meaningful physical education experiences, maintaining engaging, inclusive, and supportive activities can help encourage continued student involvement (Mathunjwa et al., 2025; Wu et al., 2022).

Overall, the 3.31 General Assessment Mean indicates that student participation during traditional Filipino game activities is Highly Integrated in PATHFit. The findings suggest that students are not only physically active during the games but also demonstrate cooperation, equitable participation, adherence to activity procedures, and support for their classmates. This is consistent with evidence that traditional games can promote physical activity participation while simultaneously providing opportunities for social interaction and cooperative learning (Çinar & Hassani, 2026; Fauzi et al., 2024).

Table 9. *Extent of Integration of Traditional Filipino Games in PATHFit in Terms of Alignment with Course Learning Outcomes*

	Indicators	Mean	VI
1.	Traditional games support lesson goals like agility, endurance, balance, or coordination. *(Nakakatulong ang tradisyunal na laro sa layunin tulad ng agility, endurance, balance, o coordination.)*	3.34	HI
2.	Traditional games make us move enough to improve fitness (running, jumping, quick steps). *(Napapagalaw kami sa tradisyunal na laro para sa fitness (takbo, talon, quick steps).)*	3.38	HI
3.	Traditional games require teamwork (roles, helping, fair turns) during play. *(Kailangan ang teamwork (roles, pagtulong, patas na turn) habang naglalaro.)*	3.42	HI
4.	The instructor explains where the game came from or its cultural meaning. *(Ipinaliliwanag ng guro ang pinagmulan ng laro o kahulugan nito sa kultura.)*	3.30	HI
5.	Traditional games help us practice PATHFit skills (movement skills, cooperation, fair play). *(Nakakatulong ang tradisyunal na laro sa PATHFit skills (movement skills, kooperasyon, fair play).)*	3.37	HI
6.	After playing, we can identify which body parts or fitness components were used. *(Pagkatapos maglaro, natutukoy namin kung anong bahagi ng katawan o fitness ang nagamit.)*	3.32	HI
7.	Traditional games are taught with safety rules that match PATHFit safety expectations. *(Itinuturo ang tradisyunal na laro na may safety rules na tugma sa PATHFit expectations.)*	3.39	HI
8.	Traditional games practice fair play (following rules, respecting calls). *(Nahuhubog ang fair play (pagsunod sa rules, pagrespeto sa tawag).)*	3.37	HI
9.	Traditional games give chances to lead (captain, organizer, scorer). *(Nagkakaroon ng pagkakataon sa pamumuno (captain, organizer, scorer).)*	3.35	HI
10.	The class connects the game experience to healthy habits (active lifestyle). *(Inuugnay ng klase ang karanasan sa laro sa healthy habits (active lifestyle).)*	3.42	HI
	General Assessment	3.37	**HI**

Legend: 3.25–4.00 = Highly Integrated (HI); 2.50–3.24 = Integrated (I); 1.75–2.49 = Slightly Integrated (SI); 1.00–1.74 = Not Integrated (NI)

Table 9 presents the extent of integration of traditional Filipino games in PATHFit in terms of alignment with course learning outcomes. The General Assessment Mean of 3.37, interpreted as Highly Integrated, indicates that traditional Filipino games are strongly aligned with the intended learning outcomes of PATHFit. This suggests that the games are perceived not only as physical activities but also as learning experiences that support fitness, movement skills, cooperation, fair play, cultural understanding, and healthy lifestyle practices. The integration of traditional games into physical education can provide meaningful opportunities to address physical, social, and cultural learning outcomes simultaneously (Bonato et al., 2024; Lavega-Burgués et al., 2023).

The highest mean of 3.42 was obtained by two indicators: "Traditional games require teamwork (roles, helping, fair turns) during play" and "The class connects the game experience to healthy habits (active lifestyle)." Both were interpreted as Highly Integrated. These findings indicate that the strongest perceived alignment involves the development of cooperative behaviors and the connection between physical activity experiences and healthy lifestyle practices. Traditional sporting games can promote cooperation, interpersonal interaction, and positive emotional experiences, while participation in structured physical activity can support the development of active lifestyle behaviors (Lavega-Burgués et al., 2023; Wu et al., 2022).

The indicators concerning fitness development, safety, movement skills, and fair play also received high ratings, ranging from 3.34 to 3.39, all interpreted as Highly Integrated. This suggests that traditional games are being used to address several physical education learning objectives rather than focusing on a single outcome. Such findings are consistent with literature describing traditional games as versatile curriculum resources that can support physical activity, movement development, and social learning while remaining adaptable to educational settings (Bonato et al., 2024; Wicahyani et al., 2025).

The lowest mean was 3.30, obtained by the indicator "The instructor explains where the game came from or its cultural meaning," although this was still interpreted as Highly Integrated. This indicates that cultural explanation is incorporated into the instruction, but comparatively less strongly than the physical and social dimensions of the games. The cultural dimension remains important because traditional games can serve as educational resources for strengthening students' awareness and appreciation of cultural heritage when their origins and meanings are intentionally incorporated into instruction (Mohamad & Usman, 2025; Wrench & Garrett, 2021).

Overall, the 3.37 General Assessment Mean indicates that traditional Filipino games are Highly Integrated with the course learning outcomes of PATHFit. The findings demonstrate that their integration extends across physical fitness, movement skills, teamwork, safety, fair play, leadership, healthy lifestyle practices, and cultural understanding. This supports the view that culturally meaningful physical activities can contribute to multidimensional learning outcomes while enriching the physical education experience (Bonato et al., 2024; Lavega-Burgués et al., 2023; Mathunjwa et al., 2025).

Table 10. *Level of Student Outcomes in Terms of Physical Engagement*

Indicators	Mean	VI
1. Traditional games make me physically active during PATHFit class. *(Napapaging aktibo ako sa tradisyunal na laro sa PATHFit class.)*	3.40	SA
2. I exert effort and energy when playing traditional games. *(Naglalaan ako ng effort at energy kapag naglalaro ng tradisyunal na laro.)*	3.41	SA
3. During traditional games, I move most of the time (run, dodge, chase, jump). *(Sa tradisyunal na laro, madalas akong gumagalaw (takbo, iwas, habol, talon).)*	3.38	SA
4. I join the game immediately when it starts instead of waiting on the side. *(Sumasali agad ako kapag nagsimula ang laro at hindi lang naghihintay sa gilid.)*	3.29	SA
5. Traditional games make my heartbeat faster and make me sweat during class. *(Sa tradisyunal na laro, bumibilis ang tibok ng puso ko at pinagpapawisan ako sa klase.)*	3.40	SA
6. I can stay active until the end of the traditional game activity. *(Nakakapanatili akong aktibo hanggang matapos ang tradisyunal na laro.)*	3.32	SA
7. I continue playing even when I get tired. *(Nagpapatuloy ako sa paglalaro kahit napapagod.)*	3.23	A
8. I try to improve my movement (speed, balance, coordination) while playing. *(Sinisikap kong pagandahin ang galaw ko (bilis, balanse, koordinasyon) habang naglalaro.)*	3.36	SA
9. I complete warm-up properly before traditional games. *(Ginagawa ko nang maayos ang warm-up bago ang tradisyunal na laro.)*	3.40	SA
10. I follow safety rules during traditional games (no pushing, safe tagging). *(Sinusunod ko ang safety rules sa tradisyunal na laro (bawal tulakan, ligtas na pag-tag).)*	3.42	SA
General Assessment	**3.36**	**SA**

Legend: 3.25–4.00 = Strongly Agree (SA); 2.50–3.24 = Agree (A); 1.75–2.49 = Disagree (D); 1.00–1.74 = Strongly Disagree (SD)

Table 10 presents the level of student outcomes in terms of physical engagement. The General Assessment Mean of 3.36, interpreted as Strongly Agree, indicates that students generally reported a high level of physical engagement during traditional Filipino game activities in PATHFit. This suggests that the activities encourage students to participate actively, exert effort, remain physically involved, and observe appropriate safety practices. Structured physical activity experiences in higher education can contribute to students' physical activity and overall well-being (Alhemedi et al., 2026; Wu et al., 2022).

The highest mean was obtained by the indicator "I follow safety rules during traditional games (no pushing, safe tagging)," with a mean of 3.42, interpreted as Strongly Agree. This indicates that students strongly recognize their adherence to safety practices during traditional games. Safety is an important component of meaningful physical education because students need to

participate actively while maintaining appropriate behaviors that minimize unnecessary risks during physical activities (Falle & Cancio, 2025; Wicahyani et al., 2025).

This was followed by "I exert effort and energy when playing traditional games," with a mean of 3.41, while three indicators—"Traditional games make me physically active during PATHFit class," "Traditional games make my heartbeat faster and make me sweat during class," and "I complete warm-up properly before traditional games"—each obtained a mean of 3.40. These results indicate that students perceive traditional games as activities that require meaningful physical effort and sustained movement. Such findings are consistent with research showing that traditional game-based physical education activities can increase students' participation and physical activity during lessons (Fauzi et al., 2024; Mathunjwa et al., 2025).

The lowest mean was obtained by "I continue playing even when I get tired," with a mean of 3.23. Although this was the lowest-rated indicator, it still falls within the Agree range based on the provided scale. This suggests that students generally remain willing to participate despite fatigue, although maintaining participation when tired is comparatively less pronounced than other aspects of physical engagement. Motivation is an important factor in sustaining participation in physical activity, particularly when students experience effort or fatigue during activities (Llanos-Muñoz et al., 2023; Ryan et al., 2021).

Overall, the 3.36 General Assessment Mean indicates a high level of physical engagement among PATHFit students during traditional Filipino game activities. The findings demonstrate that students generally experience active movement, exert physical effort, work on movement-related abilities, and observe safety practices during participation. This supports the potential of traditional games as meaningful physical education activities that can promote active participation and physical activity engagement (Fauzi et al., 2024; Lavega-Burgués et al., 2023).

Table 11. *Level of Student Outcomes in Terms of Cultural Appreciation*

	Indicators	Mean	VI
1.	Traditional games help me appreciate Filipino culture because I learn their background. *(Napapahalagahan ko ang kulturang Pilipino dahil natututuhan ko ang pinagmulan ng laro.)*	3.42	SA
2.	Playing traditional games increases my awareness of Filipino traditions. *(Mas nagiging aware ako sa tradisyon ng Pilipino dahil sa tradisyunal na laro.)*	3.42	SA
3.	I feel playing traditional games helps keep Filipino games from being forgotten. *(Pakiramdam ko, ang paglalaro ng tradisyunal na laro ay nakakatulong para hindi ito makalimutan.)*	3.41	SA
4.	I feel proud when I play traditional Filipino games in PATHFit. *(Ipinagmamalaki ko kapag naglalaro ako ng tradisyunal na larong Pilipino sa PATHFit.)*	3.39	SA
5.	I learn Filipino terms, rules, or stories connected to the game. *(Natututuhan ko ang mga salitang Pilipino, patakaran, o kuwento na konektado sa laro.)*	3.39	SA
6.	I can name at least three traditional Filipino games played in our class. *(Kaya kong banggitin ang hindi bababa sa tatlong tradisyunal na larong nilaro sa klase.)*	3.29	SA
7.	I share the traditional game with friends or family outside class. *(Naibabahagi ko ang tradisyunal na laro sa kaibigan o pamilya sa labas ng klase.)*	3.25	SA
8.	I respect the rules and proper way of playing traditional games. *(Nirerespeto ko ang patakaran at tamang paraan ng paglalaro ng tradisyunal na laro.)*	3.42	SA
9.	I feel that traditional games are part of being Filipino. *(Ramdam ko na ang tradisyunal na laro ay bahagi ng pagiging Pilipino.)*	3.43	SA
10.	After the activity, I can explain one cultural value shown in the game (teamwork, fairness). *(Pagkatapos ng gawain, naipapaliwanag ko ang isang pagpapahalaga sa laro (teamwork, fairness).)*	3.37	SA
	General Assessment	**3.38**	**SA**

Legend: 3.25–4.00 = Strongly Agree (SA); 2.50–3.24 = Agree (A); 1.75–2.49 = Disagree (D); 1.00–1.74 = Strongly Disagree (SD)

Table 11 presents the level of student outcomes in terms of cultural appreciation. The General Assessment Mean of 3.38, interpreted as Strongly Agree, indicates that students generally expressed a high level of cultural appreciation through their participation in traditional Filipino games. This suggests that the games provide students with opportunities to recognize Filipino traditions, understand cultural values, and develop a stronger connection with Filipino cultural heritage. The integration of culturally relevant content into educational experiences can strengthen students' cultural awareness and connection to their heritage (Ladson-Billings, 2021; Wrench & Garrett, 2021).

The highest mean of 3.43 was obtained by the indicator "I feel that traditional games are part of being Filipino," interpreted as Strongly Agree. This indicates that students strongly associate traditional games with Filipino identity. Traditional games are culturally rooted activities that carry historical practices, values, and forms of community interaction. Their inclusion in educational settings can therefore provide opportunities for learners to connect physical activity with cultural heritage (Lavega-Burgués et al., 2023; Mohamad & Usman, 2025).

Three indicators—"Traditional games help me appreciate Filipino culture because I learn their background," "Playing traditional games increases my awareness of Filipino traditions," and "I respect the rules and proper way of playing traditional games"—each obtained a mean of 3.42. These findings indicate that students strongly recognize the cultural and value-oriented dimensions of traditional games. Culturally responsive educational practices emphasize the importance of incorporating learners' cultural experiences and traditions into instruction to promote cultural awareness and meaningful learning (Wrench & Garrett, 2021).

The indicator concerning the preservation of Filipino games also received a high mean of 3.41, suggesting that students perceive participation as contributing to the continued recognition of traditional games. This finding is consistent with literature emphasizing that traditional games can serve as curriculum resources that preserve cultural knowledge while providing meaningful physical education experiences (Bonato et al., 2024; Wicahyani et al., 2025).

The lowest mean was 3.25, obtained by the indicator "I share the traditional game with friends or family outside class," although it remained within the Strongly Agree category. This suggests that students strongly recognize the cultural value of traditional games, but extending these experiences beyond the classroom is comparatively less evident. Nevertheless, the finding indicates that traditional games have the potential to extend cultural learning beyond formal instruction by encouraging students to share culturally meaningful activities with others (Lavega-Burgués et al., 2023; Mohamad & Usman, 2025).

Overall, the 3.38 General Assessment Mean indicates a high level of cultural appreciation among PATHFit students. The findings demonstrate that traditional Filipino games are associated with students' awareness of Filipino traditions, appreciation of cultural heritage, sense of Filipino identity, and recognition of cultural values such as teamwork and fairness. This supports the view that culturally grounded physical activities can contribute to cultural awareness and appreciation while simultaneously enriching students' physical education experiences (Bonato et al., 2024; Ladson-Billings, 2021; Wrench & Garrett, 2021).

Table 12. *Level of Student Outcomes in Terms of Motivation and Participation*

Indicators	Mean	VI
1. I attend PATHFit more willingly when traditional games are included. *(Mas masigla akong pumapasok sa PATHFit kapag may tradisyunal na laro.)*	3.36	SA
2. I enjoy playing traditional games during PATHFit activities. *(Nag-eenjoy ako sa paglalaro ng tradisyunal na laro sa PATHFit.)*	3.38	SA
3. Traditional games make me pay attention and stay engaged in class. *(Sa tradisyunal na laro, mas nakikinig at nananatiling engaged ako sa klase.)*	3.35	SA
4. I join the activity right away when the traditional game starts. *(Sumasali agad ako kapag nagsimula ang tradisyunal na laro.)*	3.29	SA
5. I look forward to PATHFit classes when traditional games are included. *(Inaabangan ko ang PATHFit classes kapag may tradisyunal na laro.)*	3.35	SA
6. I keep trying even if I lose a round or get out. *(Patuloy akong sumusubok kahit natalo o na-out ako.)*	3.35	SA
7. I volunteer to demonstrate or explain the game rules when asked. *(Nagbo-volunteer akong mag-demo o magpaliwanag ng rules kapag tinanong.)*	3.14	A
8. I participate even if I feel shy at first. *(Nakikilahok pa rin ako kahit nahihiya ako sa simula.)*	3.29	SA
9. I give effort from start to finish of the game activity. *(Nagbibigay ako ng effort mula simula hanggang matapos ang laro.)*	3.38	SA
10. I prefer activities that include traditional games compared to only exercise drills. *(Mas gusto ko ang gawain na may tradisyunal na laro kaysa puro exercise drills lang.)*	3.36	SA
General Assessment	**3.32**	**SA**

Legend: 3.25–4.00 = Strongly Agree (SA); 2.50–3.24 = Agree (A); 1.75–2.49 = Disagree (D); 1.00–1.74 = Strongly Disagree (SD)

Table 12 presents the level of student outcomes in terms of motivation and participation. The General Assessment Mean of 3.32, interpreted as Strongly Agree, indicates that students generally demonstrate a high level of motivation and participation when traditional Filipino games are included in PATHFit activities. This suggests that the games contribute to students' willingness to attend, enjoyment, attention, persistence, and active participation during class. Motivation is recognized as an important factor influencing sustained engagement in physical activity, particularly when students experience activities as enjoyable and meaningful (Llanos-Muñoz et al., 2023; Ryan et al., 2021).

The highest mean of 3.38 was obtained by "I enjoy playing traditional games during PATHFit activities" and "I give effort from start to finish of the game activity," both interpreted as Strongly Agree. These findings indicate that enjoyment and sustained effort are particularly evident among students when traditional games are incorporated into PATHFit. Enjoyable and engaging physical activities can support students' willingness to participate and sustain their involvement in physical education (Wu et al., 2022). Similarly, traditional games have been found to encourage active participation and engagement by providing interactive and meaningful activity experiences (Fauzi et al., 2024; Lavega-Burgués et al., 2023).

The indicators concerning willingness to attend PATHFit, attention and engagement, looking forward to classes, persistence after losing, immediate participation, and preference for traditional game activities all obtained means ranging from 3.29 to 3.36, and were interpreted as Strongly Agree. This pattern suggests that traditional games are associated with positive motivational experiences across several aspects of student participation. From the perspective of Self-Determination Theory, activities that provide enjoyable experiences and opportunities for competence, participation, and relatedness can support more self-determined motivation and continued engagement (Llanos-Muñoz et al., 2023; Ryan et al., 2021). The lowest mean was obtained by "I volunteer to demonstrate or explain the game rules when asked," with a mean of 3.14, interpreted as Agree. Although this remains a positive rating, it suggests that volunteering for demonstration or explanation is comparatively less evident than other forms of participation. This may indicate that students are generally willing to participate in the games themselves but may be less inclined to assume more visible or expressive roles. Teacher support and appropriate instructional strategies can help create conditions that encourage broader forms of student engagement and participation (Guo et al., 2023).

Overall, the 3.32 General Assessment Mean indicates a high level of motivation and participation among PATHFit students. The findings suggest that traditional Filipino games are associated with enjoyment, sustained effort, willingness to participate, attention, and positive attitudes toward PATHFit activities. This is consistent with empirical evidence that traditional game-based activities can enhance participation and engagement in physical education, particularly when activities are meaningful, interactive, and enjoyable (Azlan et al., 2021; Fauzi et al., 2024).

Table 13. *Level of Student Outcomes in Terms of Social Interaction and Teamwork*

Indicators	Mean	VI
1. Traditional games make us work as a team (roles, passing, helping). *(Sa tradisyunal na laro, nagtutulungan kami (roles, passing, pagtulong).)*	3.40	SA
2. I communicate with my classmates during traditional games (signals, reminders, strategy). *(Nakikipag-usap ako sa kaklase habang naglalaro (signal, paalala, strategy).)*	3.38	SA
3. During traditional games, classmates take turns and share roles fairly. *(Sa tradisyunal na laro, nagsasalitan at patas ang roles ng magkaklase.)*	3.38	SA
4. Traditional games help us feel closer and more comfortable with classmates. *(Sa tradisyunal na laro, mas nagiging malapit at komportable kami sa kaklase.)*	3.38	SA
5. During traditional games, we use respectful words and avoid teasing. *(Sa tradisyunal na laro, gumagamit kami ng magalang na salita at umiiwas sa panunukso.)*	3.36	SA
6. When there is disagreement, I follow the agreed rule or teacher decision. *(Kapag may pagtatalo, sinusunod ko ang napagkasunduang rule o desisyon ng guro.)*	3.39	SA
7. I invite classmates to join and do not exclude anyone. *(Inaanyayahan ko ang kaklase na sumali at hindi ko iniiwan ang iba.)*	3.31	SA
8. I can lead a small group or be a team captain when assigned. *(Kaya kong mamuno sa grupo o maging captain kapag in-assign.)*	3.14	A
9. I help classmates understand the rules or steps of the game. *(Tinutulungan ko ang kaklase na maintindihan ang rules o hakbang ng laro.)*	3.31	SA
10. I accept wins and losses respectfully during games. *(Tinatanggap ko nang maayos ang panalo at pagkatalo sa laro.)*	3.44	SA
General Assessment	**3.35**	**SA**

Legend: 3.25–4.00 = Strongly Agree (SA); 2.50–3.24 = Agree (A); 1.75–2.49 = Disagree (D); 1.00–1.74 = Strongly Disagree (SD)

Table 13 presents the level of student outcomes in terms of social interaction and teamwork. The General Assessment Mean of 3.35, interpreted as Strongly Agree, indicates that students generally demonstrate positive social interaction and teamwork while participating in traditional Filipino games. The finding suggests that these activities provide opportunities for students to cooperate, communicate, share roles, follow agreed rules, and interact respectfully with their classmates. Traditional games have been associated with the development of social skills and positive interpersonal experiences in physical education (Çinar & Hassani, 2026; Lavega-Burgués et al., 2023).

The highest mean was obtained by the indicator "I accept wins and losses respectfully during games," with a mean of 3.44, interpreted as Strongly Agree. This indicates that students strongly demonstrate respectful behavior regardless of the outcome of the game. Such behavior reflects the social and emotional dimensions of traditional games, which can provide opportunities for students to experience cooperation, competition, and interpersonal interaction within structured activities (Lavega-Burgués et al., 2023).

The indicator "Traditional games make us work as a team (roles, passing, helping)" obtained a mean of 3.40, while "When there is disagreement, I follow the agreed rule or teacher decision" obtained 3.39. These findings indicate that teamwork and responsible responses to disagreements are strongly evident during gameplay. Cooperative learning experiences can promote interaction, shared responsibility, and positive peer relationships when students work toward common activity goals (Zach et al., 2023). Traditional games can similarly provide structured opportunities for cooperation and social interaction through shared roles and rules (Çinar & Hassani, 2026).

Several other indicators, including communication, fair sharing of roles, developing closeness with classmates, respectful language, inclusion, and helping classmates understand the game, obtained means ranging from 3.31 to 3.38, all interpreted as Strongly Agree. This pattern indicates that social interaction extends beyond simply working together during gameplay and includes respectful communication and inclusive behaviors. Supportive peer and learning environments can contribute to stronger student engagement and participation in physical education (Guo et al., 2023).

The lowest mean was obtained by "I can lead a small group or be a team captain when assigned," with a mean of 3.14, interpreted as Agree. Although students generally agreed with the statement, leadership was comparatively less evident than other forms of social interaction and teamwork. This suggests that students may participate effectively as team members but may have fewer opportunities or less confidence in assuming formal leadership roles. Providing structured opportunities for students to take leadership responsibilities may therefore further strengthen the social and collaborative outcomes of traditional game activities (Lavega-Burgués et al., 2023; Zach et al., 2023).

Overall, the 3.35 General Assessment Mean indicates a high level of social interaction and teamwork among PATHFit students. The findings demonstrate that traditional Filipino games are associated with cooperation, communication, fairness, respectful behavior, inclusion, and acceptance of both winning and losing. These findings support the view that traditional games can serve not only as physical activities but also as meaningful learning experiences that foster social interaction and cooperative behavior in physical education (Çinar & Hassani, 2026; Lavega-Burgués et al., 2023).

Table 14. *Test of Difference in the Extent of Integration of Traditional Filipino Games in PATHFit When Respondents Are Grouped by Age*

Students' Profile Variables	Extent of Integration of Traditional Filipino Games in PATHFit	F-value	N	P-value	Remarks	Decision
Age	Frequency of Implementation	5.61	368	0.004	Significant	Reject the Ho
	Variety of Games Introduced	4.18	368	0.016	Significant	Reject the Ho
	Instructional Strategies Used	1.47	368	0.231	Not Significant	Accept the Ho
	Student Participation During Activities	2.12	368	0.122	Not Significant	Accept the Ho
	Alignment with Course Learning Outcomes	2.15	368	0.118	Not Significant	Accept the Ho

Table 14 presents the one-way ANOVA results comparing the extent of integration of traditional Filipino games in PATHFit across age groups. Significant differences were found in frequency of implementation ($F(2, 365) = 5.61$, $p = 0.004$) and variety of games introduced ($F(2, 365) = 4.18$, $p = 0.016$). Since both p-values are below the 0.05 level of significance, the null hypothesis is rejected for these two dimensions. Students aged 20–21 years old ($M = 3.40$) rated the integration higher than those aged 18–19

years old (M = 3.22), and Tukey post hoc tests confirmed that this difference was significant for both frequency of implementation and variety of games introduced.

The significant differences, although limited to two dimensions, suggest that students' perceptions of how frequently traditional Filipino games are implemented and how varied the games are differ across age groups, with older students reporting more favorable assessments. Differences in students' prior experiences and exposure to physical activities may influence how they perceive and experience physical education activities (Llanos-Muñoz et al., 2023; Ryan et al., 2021). The use of varied traditional games may likewise provide students with different opportunities for participation and engagement in physical education (Bonato et al., 2024; Lavega-Burgués et al., 2023).

In contrast, no significant differences were found in instructional strategies used ($F(2, 365) = 1.47$, $p = 0.231$), student participation during activities ($F(2, 365) = 2.12$, $p = 0.122$), or alignment with course learning outcomes ($F(2, 365) = 2.15$, $p = 0.118$). Since the p-values are greater than 0.05, the null hypothesis is accepted for these dimensions. This indicates that these aspects of traditional game integration are experienced relatively consistently across the age groups represented in the study. Structured instructional practices and teacher support may contribute to maintaining students' participation and engagement regardless of individual characteristics (Guo et al., 2023).

Overall, the findings indicate that the extent of integration differs significantly by age in terms of frequency of implementation and variety of games introduced, but not in terms of instructional strategies used, student participation during activities, and alignment with course learning outcomes. Thus, the null hypothesis is rejected for frequency of implementation and variety of games introduced, but accepted for the remaining three dimensions. The confirmed difference lies between the two largest age groups (18–19 and 20–21 years old), as the oldest group comprised only 6 respondents.

Table 15. *Test of Difference in the Extent of Integration of Traditional Filipino Games in PATHFit When Respondents Are Grouped by Sex*

Students' Profile Variables	Extent of Integration of Traditional Filipino Games in PATHFit	t-value	N	P-value	Remarks	Decision
Sex	Frequency of Implementation	-0.17	368	0.867	Not Significant	Accept the Ho
	Variety of Games Introduced	-0.48	368	0.628	Not Significant	Accept the Ho
	Instructional Strategies Used	0.47	368	0.638	Not Significant	Accept the Ho
	Student Participation During Activities	0.61	368	0.543	Not Significant	Accept the Ho
	Alignment with Course Learning Outcomes	0.70	368	0.487	Not Significant	Accept the Ho

Table 15 presents the independent-samples t-test results comparing the extent of integration of traditional Filipino games in PATHFit between male and female students. The t-values range from t = -0.48 to t = 0.70, with all p-values (0.487 to 0.867) greater than the 0.05 level of significance: frequency of implementation (t = -0.17, p = 0.867), variety of games introduced (t = -0.48, p = 0.628), instructional strategies used (t = 0.47, p = 0.638), student participation during activities (t = 0.61, p = 0.543), and alignment with course learning outcomes (t = 0.70, p = 0.487). Therefore, the null hypothesis is accepted for all dimensions.

The results indicate that male (M = 3.27) and female (M = 3.29) students do not differ significantly in their assessment of the extent of integration of traditional Filipino games in PATHFit. This suggests that male and female PATHFit students generally reported similar experiences regarding the frequency, variety, instructional implementation, participation, and learning-outcome alignment of traditional Filipino games. Physical education activities that provide supportive and meaningful opportunities for participation can encourage engagement among students across different individual characteristics (Wu et al., 2022).

The absence of significant differences in frequency of implementation and variety of games introduced indicates that the exposure of students to traditional Filipino games does not substantially differ according to sex. Similarly, the non-significant findings for instructional strategies and student participation suggest that these aspects of implementation are generally experienced in a comparable manner by male and female students (Guo et al., 2023). Likewise, the non-significant difference in alignment with course learning outcomes suggests that male and female students similarly perceive the contribution of traditional Filipino games to PATHFit learning experiences, as traditional games can be adapted as curriculum resources that support physical, social, and cultural learning outcomes across students (Bonato et al., 2024; Lavega-Burgués et al., 2023).

Overall, the findings indicate that the extent of integration of traditional Filipino games in PATHFit does not differ significantly between male and female students across all five dimensions. Thus, the null hypothesis is accepted for frequency of implementation, variety of games introduced, instructional strategies used, student participation during activities, and alignment

with course learning outcomes. This indicates that the integration of traditional Filipino games is generally experienced similarly by male and female PATHFit students.

Table 16. *Test of Difference in the Extent of Integration of Traditional Filipino Games in PATHFit When Respondents Are Grouped by Year Level*

Students' Profile Variables	Extent of Integration of Traditional Filipino Games in PATHFit	F-value	N	P-value	Remarks	Decision
Year Level	Frequency of Implementation	4.50	368	0.004	Significant	Reject the Ho
	Variety of Games Introduced	3.62	368	0.013	Significant	Reject the Ho
	Instructional Strategies Used	2.51	368	0.059	Not Significant	Accept the Ho
	Student Participation During Activities	2.49	368	0.060	Not Significant	Accept the Ho
	Alignment with Course Learning Outcomes	2.39	368	0.069	Not Significant	Accept the Ho

Table 16 presents the one-way ANOVA results comparing the extent of integration of traditional Filipino games in PATHFit across year levels. Significant differences were found in frequency of implementation ($F(3, 364) = 4.50$, $p = 0.004$) and variety of games introduced ($F(3, 364) = 3.62$, $p = 0.013$). Thus, the null hypothesis is rejected for these two dimensions. Fourth-year students ($M = 3.85$) gave the highest ratings, compared with first-year ($M = 3.30$), second-year ($M = 3.22$), and third-year ($M = 3.32$) students. Tukey post hoc tests show that the fourth-year group rated frequency of implementation significantly higher than the first- and second-year groups, and variety of games introduced significantly higher than the second-year group.

These results suggest that students' perceptions of how frequently traditional Filipino games are implemented and how varied they are differ according to academic level. Differences in students' exposure to PATHFit activities and learning experiences across year levels may be associated with these variations. Traditional games can provide varied physical and learning experiences when they are appropriately incorporated into instruction (Bonato et al., 2024; Wicahyani et al., 2025). However, these results should be interpreted with caution because the fourth-year group is small ($n = 12$).

No significant differences were found in instructional strategies used ($F(3, 364) = 2.51$, $p = 0.059$), student participation during activities ($F(3, 364) = 2.49$, $p = 0.060$), and alignment with course learning outcomes ($F(3, 364) = 2.39$, $p = 0.069$). Although these p-values are close to the threshold, they are greater than the 0.05 level of significance, so the null hypothesis is accepted for these dimensions.

The non-significant differences in these three dimensions indicate that the teaching approaches, participation experiences, and perceived contribution of traditional games to PATHFit learning outcomes are generally comparable across year levels. Teacher support and appropriate instructional practices are important in promoting student engagement in physical education (Guo et al., 2023), and traditional games can address physical, social, and cultural dimensions of physical education when appropriately incorporated into instruction (Bonato et al., 2024; Lavega-Burgués et al., 2023).

Overall, the findings indicate that the extent of integration differs significantly by year level in terms of frequency of implementation and variety of games introduced, but not in terms of instructional strategies used, student participation during activities, and alignment with course learning outcomes. Therefore, the null hypothesis is rejected for frequency of implementation and variety of games introduced, and accepted for the remaining three dimensions.

Table 17. *Test of Difference in the Extent of Integration of Traditional Filipino Games in PATHFit When Respondents Are Grouped by College/Program*

Students' Profile Variables	Extent of Integration of Traditional Filipino Games in PATHFit	F-value	N	P-value	Remarks	Decision
College/Program	Frequency of Implementation	1.69	368	0.169	Not Significant	Accept the Ho
	Variety of Games Introduced	1.86	368	0.137	Not Significant	Accept the Ho
	Instructional Strategies Used	1.58	368	0.193	Not Significant	Accept the Ho
	Student Participation During Activities	1.08	368	0.356	Not Significant	Accept the Ho
	Alignment with Course Learning Outcomes	1.53	368	0.207	Not Significant	Accept the Ho

Table 17 presents the one-way ANOVA results comparing the extent of integration of traditional Filipino games in PATHFit across colleges/programs. None of the differences was statistically significant: frequency of implementation ($F(3, 364) = 1.69$, $p = 0.169$), variety of games introduced ($F(3, 364) = 1.86$, $p = 0.137$), instructional strategies used ($F(3, 364) = 1.58$, $p = 0.193$), student participation during activities ($F(3, 364) = 1.08$, $p = 0.356$), and alignment with course learning outcomes ($F(3, 364) = 1.53$, $p = 0.207$). Since all p-values are greater than 0.05, the null hypothesis is accepted across all dimensions.

These results indicate that the extent of integration does not differ significantly by college or program, although Education students (M = 3.47) had numerically higher ratings than Information Technology/Computing (M = 3.26) and Engineering Technology (M = 3.23) students. Students from different academic programs therefore generally reported comparable experiences in terms of how frequently traditional games were implemented, the variety of games introduced, the instructional strategies used, their participation during activities, and the alignment of the games with PATHFit learning outcomes.

Traditional games can be utilized as flexible curriculum resources that support physical activity, social interaction, and cultural learning across different educational contexts (Bonato et al., 2024; Lavega-Burgués et al., 2023). Effective instructional practices and teacher support likewise remain important in promoting student engagement and meaningful participation in physical education regardless of academic program (Guo et al., 2023; Wicahyani et al., 2025).

Overall, the findings indicate that the extent of integration of traditional Filipino games in PATHFit does not differ significantly across colleges/programs in any of the five dimensions. Thus, the null hypothesis is accepted for frequency of implementation, variety of games introduced, instructional strategies used, student participation during activities, and alignment with course learning outcomes. The findings suggest that the implementation of traditional Filipino games is generally consistent across the academic programs represented in the study.

Table 18. *Test of Difference in the Level of Student Outcomes When Respondents Are Grouped by Age*

Students' Profile Variables	Level of Students Outcomes	F-value	N	P-value	Remarks	Decision
Age	Physical Engagement	3.17	368	0.043	Significant	Reject the Ho
	Cultural Appreciation	3.75	368	0.024	Significant	Reject the Ho
	Motivation and Participation	3.68	368	0.026	Significant	Reject the Ho
	Social Interaction and Teamwork	4.41	368	0.013	Significant	Reject the Ho

Table 18 presents the one-way ANOVA results comparing the level of student outcomes across age groups. Significant differences were found in physical engagement ($F(2, 365) = 3.17$, $p = 0.043$), cultural appreciation ($F(2, 365) = 3.75$, $p = 0.024$), motivation and participation ($F(2, 365) = 3.68$, $p = 0.026$), and social interaction and teamwork ($F(2, 365) = 4.41$, $p = 0.013$). Since all p-values are below the 0.05 level of significance, the null hypothesis is rejected for all four dimensions. Students aged 20–21 years old (M = 3.49) reported higher outcomes than those aged 18–19 years old (M = 3.28), and Tukey post hoc tests confirmed this difference for all four outcomes.

These results suggest that older students tend to report higher levels of the measured outcomes than younger students. Individual differences in motivation, prior experiences, and engagement with physical activity may contribute to variations in students' experiences in physical education (Llanos-Muñoz et al., 2023; Ryan et al., 2021).

The significant difference in physical engagement suggests that students' reported physical involvement during traditional Filipino games varies by age. Traditional games provide opportunities for movement and active participation, which can support physical activity experiences among students (Fauzi et al., 2024; Mathunjwa et al., 2025). Age-related differences were also found in cultural appreciation, suggesting that students may recognize and value the cultural dimensions of traditional Filipino games differently. Culturally grounded educational experiences can provide opportunities for learners to develop awareness and appreciation of cultural heritage through meaningful learning activities (Bonato et al., 2024; Wrench & Garrett, 2021).

Similarly, the significant differences in motivation and participation indicate that students' willingness and engagement in traditional game activities vary by age. Enjoyable and meaningful physical education experiences can support students' motivation and sustained participation in physical activity (Lavega-Burgués et al., 2023; Ryan et al., 2021).

Finally, age showed the strongest difference in social interaction and teamwork ($F(2, 365) = 4.41$, $p = 0.013$). Traditional games provide opportunities for cooperation, communication, shared roles, and interaction with peers, which can contribute to social learning within physical education (Çinar & Hassani, 2026; Lavega-Burgués et al., 2023).

Overall, the findings indicate that the level of student outcomes differs significantly by age in all four dimensions. Therefore, the null hypothesis is rejected for physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. The results suggest that students aged 20–21 years old reported more favorable outcomes than those aged 18–19 years old in the context of traditional Filipino games in PATHFit.

Table 19. *Test of Difference in the Level of Student Outcomes When Respondents Are Grouped by Sex*

Students' Profile Variables	Level of Students Outcomes	t-value	N	P-value	Remarks	Decision
Sex	Physical Engagement	-0.92	368	0.361	Not Significant	Accept the Ho
	Cultural Appreciation	-0.02	368	0.985	Not Significant	Accept the Ho
	Motivation and Participation	-0.92	368	0.358	Not Significant	Accept the Ho
	Social Interaction and Teamwork	-0.29	368	0.776	Not Significant	Accept the Ho

Table 19 presents the independent-samples t-test results comparing the level of student outcomes between male and female students. The t-values range from t = -0.92 to t = -0.02, and all p-values (0.358 to 0.985) are greater than the 0.05 level of significance: physical engagement (t = -0.92, p = 0.361), cultural appreciation (t = -0.02, p = 0.985), motivation and participation (t = -0.92, p = 0.358), and social interaction and teamwork (t = -0.29, p = 0.776). Therefore, the null hypothesis is accepted across all four dimensions.

The results indicate that the level of student outcomes does not differ significantly between male (M = 3.37) and female (M = 3.33) students. This suggests that male and female PATHFit students generally reported comparable levels of physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork.

The absence of a significant difference in physical engagement suggests that male and female students reported similar levels of active involvement during traditional Filipino game activities. Traditional games can provide opportunities for students to participate in physical activity through varied and engaging movement experiences (Fauzi et al., 2024; Mathunjwa et al., 2025). Similarly, the non-significant difference in motivation and participation suggests that students' willingness and engagement in these activities were comparable across sex (Llanos-Muñoz et al., 2023; Ryan et al., 2021).

The finding for cultural appreciation shows virtually no difference between male and female students (t = -0.02, p = 0.985), suggesting that appreciation and awareness of Filipino cultural traditions through traditional games were similarly experienced by both groups. Culturally responsive physical education can provide learners with opportunities to engage with cultural heritage regardless of demographic characteristics (Bonato et al., 2024; Wrench & Garrett, 2021). Likewise, the absence of a significant difference in social interaction and teamwork indicates that male and female students reported similar experiences in cooperation, communication, respectful interaction, and teamwork (Çinar & Hassani, 2026; Lavega-Burgués et al., 2023).

Overall, the findings indicate that sex does not produce significant differences in any of the four dimensions of student outcomes. Thus, the null hypothesis is accepted for physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. This suggests that the level of student outcomes associated with traditional Filipino games in PATHFit is generally comparable among male and female students.

Table 20. *Test of Difference in the Level of Student Outcomes When Respondents Are Grouped by Year Level*

Students' Profile Variables	Level of Students Outcomes	F-value	N	P-value	Remarks	Decision
Year Level	Physical Engagement	2.98	368	0.031	Significant	Reject the Ho
	Cultural Appreciation	2.80	368	0.040	Significant	Reject the Ho
	Motivation and Participation	2.58	368	0.053	Not Significant	Accept the Ho
	Social Interaction and Teamwork	2.31	368	0.076	Not Significant	Accept the Ho

Table 20 presents the one-way ANOVA results comparing the level of student outcomes across year levels. Significant differences were found in physical engagement (F(3, 364) = 2.98, p = 0.031) and cultural appreciation (F(3, 364) = 2.80, p = 0.040), while no significant differences were found in motivation and participation (F(3, 364) = 2.58, p = 0.053) and social interaction and teamwork (F(3, 364) = 2.31, p = 0.076). Thus, the null hypothesis is rejected for physical engagement and cultural appreciation, and accepted for motivation and participation and for social interaction and teamwork.

Fourth-year students (M = 3.87) reported the highest outcomes, compared with first-year (M = 3.34), second-year (M = 3.30), and third-year (M = 3.41) students. Tukey post hoc tests show that the fourth-year group differed significantly from the second-year group in both significant outcomes, and from the first-year group in physical engagement. These results should be interpreted with caution because the fourth-year group is small (n = 12).

The significant difference in physical engagement suggests that students' reported active involvement in traditional Filipino games varies by academic level. Traditional games can provide opportunities for physical activity and participation across learners when they are appropriately incorporated into physical education instruction (Fauzi et al., 2024; Mathunjwa et al., 2025). Similarly, the significant difference in cultural appreciation suggests that students' recognition and appreciation of Filipino culture through traditional games differ across academic levels. Traditional games can function as culturally meaningful curriculum resources that provide opportunities for learners to engage with cultural heritage (Bonato et al., 2024; Wicahyani et al., 2025).

The non-significant differences in motivation and participation (p = 0.053) and social interaction and teamwork (p = 0.076) indicate that students' willingness to participate and their experiences of cooperation and peer interaction did not differ significantly according to year level. Supportive instructional environments and meaningful physical education activities can promote engagement and social interaction among students across different learning contexts (Guo et al., 2023; Lavega-Burgués et al., 2023).

Overall, the findings indicate that the level of student outcomes differs significantly by year level in physical engagement and cultural appreciation, but not in motivation and participation and social interaction and teamwork. Therefore, the null hypothesis is rejected for physical engagement and cultural appreciation, and accepted for motivation and participation and social interaction and teamwork. The results suggest that student outcomes associated with traditional Filipino games in PATHFit are generally consistent across year levels, with limited differences that are driven largely by the small fourth-year group.

Table 21. *Test of Difference in the Level of Student Outcomes When Respondents Are Grouped by College/Program*

Students' Profile Variables	Level of Students Outcomes	F-value	N	P-value	Remarks	Decision
College/Program	Physical Engagement	1.80	368	0.147	Not Significant	Accept the Ho
	Cultural Appreciation	1.58	368	0.194	Not Significant	Accept the Ho
	Motivation and Participation	0.97	368	0.407	Not Significant	Accept the Ho
	Social Interaction and Teamwork	0.99	368	0.399	Not Significant	Accept the Ho

Table 21 presents the one-way ANOVA results comparing the level of student outcomes across colleges/programs. None of the differences was statistically significant: physical engagement ($F(3, 364) = 1.80$, $p = 0.147$), cultural appreciation ($F(3, 364) = 1.58$, $p = 0.194$), motivation and participation ($F(3, 364) = 0.97$, $p = 0.407$), and social interaction and teamwork ($F(3, 364) = 0.99$, $p = 0.399$). Hence, the null hypothesis is accepted across all four dimensions.

These results indicate that student outcomes do not differ significantly by college or program, although Education students (M = 3.50) had numerically higher outcomes than Information Technology/Computing (M = 3.35) and Engineering Technology (M = 3.27) students. Students from different academic programs therefore generally reported comparable levels of physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork in relation to traditional Filipino games.

The non-significant difference in physical engagement indicates that students' active involvement in traditional game activities was generally similar across academic programs. Traditional games can provide accessible opportunities for physical activity and participation when appropriately incorporated into physical education (Fauzi et al., 2024; Mathunjwa et al., 2025). Likewise, the absence of a significant difference in cultural appreciation suggests that students' recognition and appreciation of Filipino cultural heritage through traditional games were not substantially differentiated by academic program (Bonato et al., 2024; Wicahyani et al., 2025).

The results for motivation and participation and social interaction and teamwork likewise show no significant differences by college/program. This suggests that students generally experienced similar motivational, participatory, cooperative, and interpersonal outcomes regardless of their academic program. Meaningful and supportive physical education experiences can encourage engagement and positive peer interaction across different student groups (Guo et al., 2023; Ryan et al., 2021).

Overall, the findings indicate that the level of student outcomes does not differ significantly across colleges/programs in any of the four dimensions. Thus, the null hypothesis is accepted for physical engagement, cultural appreciation, motivation and

participation, and social interaction and teamwork. The results suggest that the student outcomes associated with traditional Filipino games in PATHFit are generally consistent across the different colleges and academic programs represented in the study.

Table 22. *Relationship Between Frequency of Implementation of Traditional Filipino Games in PATHFit and Students' Outcomes*

Extent of Integration of Traditional Filipino Games in PATHFit	Level of Students Outcomes	R-value	N	P-value	Remarks	Decision
Frequency of Implementation	Physical Engagement	0.719	368	<0.001	Significant	Reject the Ho
	Cultural Appreciation	0.707	368	<0.001	Significant	Reject the Ho
	Motivation and Participation	0.731	368	<0.001	Significant	Reject the Ho
	Social Interaction and Teamwork	0.732	368	<0.001	Significant	Reject the Ho

Table 22 presents the relationship between frequency of implementation of traditional Filipino games in PATHFit and the level of student outcomes. The results indicate significant positive relationships across all four dimensions. Frequency of implementation is significantly related to physical engagement ($r = 0.719$, $p < 0.001$), cultural appreciation ($r = 0.707$, $p < 0.001$), motivation and participation ($r = 0.731$, $p < 0.001$), and social interaction and teamwork ($r = 0.732$, $p < 0.001$). Since all p-values are below the 0.05 level of significance, the null hypothesis is rejected for all dimensions.

The correlation coefficients, ranging from 0.707 to 0.732, indicate strong positive relationships. This suggests that more frequent implementation of traditional Filipino games is associated with higher levels of student outcomes. In particular, the strongest relationship was found between frequency of implementation and social interaction and teamwork ($r = 0.732$), followed by motivation and participation ($r = 0.731$), physical engagement ($r = 0.719$), and cultural appreciation ($r = 0.707$*).* These findings indicate that the frequency with which traditional games are incorporated into PATHFit is meaningfully associated with multiple dimensions of students' learning and participation experiences.

The significant relationship with physical engagement suggests that more frequent opportunities to participate in traditional Filipino games are associated with greater physical involvement among students. Traditional games commonly involve active movement and can provide meaningful opportunities for students to engage in physical activity during physical education (Fauzi et al., 2024; Mathunjwa et al., 2025).

The strong positive relationship between frequency of implementation and cultural appreciation indicates that repeated exposure to traditional Filipino games may be associated with stronger recognition and appreciation of Filipino cultural heritage. Traditional games can function as curriculum resources that connect physical activity with cultural knowledge and identity (Bonato et al., 2024; Wicahyani et al., 2025).

Similarly, the significant relationship with motivation and participation suggests that frequent inclusion of traditional games is associated with students' willingness, enjoyment, persistence, and active involvement in PATHFit. Enjoyable and meaningful physical activity experiences can support students' intrinsic motivation and sustained participation (Llanos-Muñoz et al., 2023; Ryan et al., 2021). Research on traditional games also indicates their potential to promote student participation and engagement in physical education (Fauzi et al., 2024).

The strongest relationship was observed between frequency of implementation and social interaction and teamwork. This finding suggests that repeated opportunities to participate in traditional games are strongly associated with students' experiences of cooperation, communication, shared roles, and respectful interaction. Traditional games can provide structured social experiences that encourage cooperation and interpersonal interaction among learners (Çinar & Hassani, 2026; Lavega-Burgués et al., 2023).

Overall, the findings demonstrate that frequency of implementation of traditional Filipino games has a significant and strong positive relationship with all four dimensions of student outcomes. Therefore, the null hypothesis is rejected for physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. The results suggest that more frequent integration of traditional Filipino games in PATHFit is strongly associated with more positive student outcomes across physical, cultural, motivational, and social dimensions.

Table 23. *Relationship Between Variety of Games Introduced and Students' Outcomes*

Extent of Integration of Traditional Filipino Games in PATHFit	Level of Students Outcomes	R-value	N	P-value	Remarks	Decision
Variety of Games Introduced	Physical Engagement	0.735	368	<0.001	Significant	Reject the Ho
	Cultural Appreciation	0.740	368	<0.001	Significant	Reject the Ho
	Motivation and Participation	0.751	368	<0.001	Significant	Reject the Ho
	Social Interaction and Teamwork	0.743	368	<0.001	Significant	Reject the Ho

Table 23 presents the relationship between variety of games introduced and the level of student outcomes. The results reveal significant positive relationships across all four dimensions. Variety of games introduced is significantly related to physical engagement ($r = 0.735$, $p < 0.001$), cultural appreciation ($r = 0.740$, $p < 0.001$), motivation and participation ($r = 0.751$, $p < 0.001$), and social interaction and teamwork ($r = 0.743$, $p < 0.001$). Since all p-values are below the 0.05 level of significance, the null hypothesis is rejected for all dimensions.

The correlation coefficients range from 0.735 to 0.751, indicating strong positive relationships. This suggests that greater variety in the traditional Filipino games introduced in PATHFit is associated with higher levels of student outcomes. The strongest relationship was found between variety of games introduced and motivation and participation ($r = 0.751$), followed by social interaction and teamwork ($r = 0.743$), cultural appreciation ($r = 0.740$), and physical engagement ($r = 0.735$*).* These findings indicate that providing students with varied traditional game experiences is strongly associated with positive outcomes across the physical, cultural, motivational, and social dimensions.

The significant relationship with physical engagement suggests that introducing different traditional games may provide students with varied movement experiences and opportunities for active participation. Traditional games can incorporate different forms of movement and physical activity, making them useful resources for physical education (Fauzi et al., 2024; Mathunjwa et al., 2025).

The relationship with cultural appreciation indicates that exposure to a wider variety of traditional Filipino games is associated with greater appreciation of Filipino culture and traditions. Introducing games with different cultural backgrounds, names, rules, and practices can provide opportunities for students to encounter diverse aspects of cultural heritage (Bonato et al., 2024; Wicahyani et al., 2025).

The strongest relationship was observed between variety of games introduced and motivation and participation ($r = 0.751$). This suggests that students may experience greater motivation and participation when they are exposed to different games rather than repeatedly engaging in the same activity. Variety and novelty can contribute to more engaging physical education experiences and support students' motivation to participate (Guo et al., 2025; Ryan et al., 2021).

The significant relationship with social interaction and teamwork further suggests that varied traditional games provide opportunities for students to experience different roles, forms of cooperation, communication, and group interactions. Traditional sporting games have been associated with positive emotional and social experiences, including opportunities for interaction and cooperation among participants (Çinar & Hassani, 2026; Lavega-Burgués et al., 2023).

Overall, the findings demonstrate that variety of games introduced has a significant and strong positive relationship with all four dimensions of student outcomes. Therefore, the null hypothesis is rejected for physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. The results suggest that greater variety in traditional Filipino games introduced in PATHFit is strongly associated with more positive student outcomes across the different dimensions examined.

Table 24. *Relationship Between Instructional Strategies Used and Students' Outcomes*

Extent of Integration of Traditional Filipino Games in PATHFit	Level of Students Outcomes	R-value	N	P-value	Remarks	Decision
Instructional Strategies Used	Physical Engagement	0.810	368	<0.001	Significant	Reject the Ho
	Cultural Appreciation	0.813	368	<0.001	Significant	Reject the Ho
	Motivation and Participation	0.794	368	<0.001	Significant	Reject the Ho
	Social Interaction and Teamwork	0.813	368	<0.001	Significant	Reject the Ho

Table 24 presents the relationship between instructional strategies used in integrating traditional Filipino games and the level of student outcomes. The results show significant positive relationships across all four dimensions. Instructional strategies used are significantly related to physical engagement ($r = 0.810$, $p < 0.001$), cultural appreciation ($r = 0.813$, $p = 0.000$), motivation and participation ($r = 0.794$, $p < 0.001$), and social interaction and teamwork ($r = 0.813$, $p < 0.001$). Since all p-values are below the 0.05 level of significance, the null hypothesis is rejected for all dimensions.

The correlation coefficients range from 0.794 to 0.813, indicating very strong positive relationships. This suggests that more effective and consistently applied instructional strategies in the integration of traditional Filipino games are strongly associated with higher levels of student outcomes. Among the four dimensions, the strongest relationships were observed with cultural appreciation and social interaction and teamwork, both with $r = 0.813$, followed by physical engagement ($r = 0.810$) and motivation and participation ($r = 0.794$).

The significant relationship with physical engagement indicates that appropriate instructional strategies may be strongly associated with students' active involvement during traditional game activities. Clear explanations, demonstrations, step-by-step instructions, safety reminders, and appropriate adjustments to activities can help students understand how to participate and remain actively involved. Effective instructional practices are important in creating meaningful and engaging physical education experiences (Falle & Cancio, 2025; Wicahyani et al., 2025).

The strong relationship between instructional strategies and cultural appreciation suggests that the way traditional games are taught may be important in helping students recognize their cultural significance. When instructors explain the origins, meanings, rules, and values associated with traditional games, the physical activity can be connected with cultural learning. Culturally responsive pedagogy emphasizes the integration of learners' cultural knowledge and experiences into meaningful educational practices (Ladson-Billings, 2021; Wrench & Garrett, 2021).

The relationship with motivation and participation was also very strong ($r = 0.794$, $p < 0.001$). This indicates that instructional strategies are strongly associated with students' willingness to participate, enjoyment, attention, and sustained effort during traditional game activities. Supportive instructional environments and appropriate teaching strategies can contribute to student engagement and motivation in physical education (Guo et al., 2023; Ryan et al., 2021).

The strongest relationships were found between instructional strategies and cultural appreciation and social interaction and teamwork, both with $r = 0.813$. The finding for social interaction and teamwork suggests that instructional practices such as assigning roles, encouraging cooperation, providing feedback, ensuring fair participation, and establishing clear rules may be strongly associated with students' interpersonal experiences during traditional games. Cooperative learning provides opportunities for students to work together, share responsibilities, and develop positive social interactions (Zach et al., 2023).

Overall, the findings demonstrate that instructional strategies used have a significant and very strong positive relationship with all four dimensions of student outcomes. Therefore, the null hypothesis is rejected for physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. The results suggest that the quality and consistency of instructional strategies used in implementing traditional Filipino games are strongly associated with positive physical, cultural, motivational, and social outcomes among PATHFit students.

Table 25. *Relationship Between Student Participation During Activities and Students' Outcomes*

Extent of Integration of Traditional Filipino Games in PATHFit	Level of Students Outcomes	R-value	N	P-value	Remarks	Decision
Student Participation During Activities	Physical Engagement	0.814	368	<0.001	Significant	Reject the Ho
	Cultural Appreciation	0.812	368	<0.001	Significant	Reject the Ho
	Motivation and Participation	0.795	368	<0.001	Significant	Reject the Ho
	Social Interaction and Teamwork	0.812	368	<0.001	Significant	Reject the Ho

Table 25 presents the relationship between student participation during activities and the level of student outcomes. The results reveal significant positive relationships across all four dimensions. Student participation is significantly related to physical engagement ($r = 0.814$, $p < 0.001$), cultural appreciation ($r = 0.812$, $p < 0.001$), motivation and participation ($r = 0.795$, $p < 0.001$), and social interaction and teamwork ($r = 0.812$, $p < 0.001$). Since all p-values are below the 0.05 level of significance, the null hypothesis is rejected for all dimensions.

The correlation coefficients range from 0.795 to 0.814, indicating very strong positive relationships. This suggests that higher levels of student participation during traditional Filipino game activities are strongly associated with higher levels of student outcomes. The strongest relationship was found between student participation and physical engagement (r = 0.814), followed by cultural appreciation and social interaction and teamwork, both with r = 0.812, while motivation and participation obtained r = 0.795.

The strong relationship with physical engagement indicates that active participation in traditional games is closely associated with students' physical involvement during PATHFit activities. Traditional games provide opportunities for movement, active effort, and varied physical activity, which can contribute to meaningful participation in physical education (Fauzi et al., 2024; Mathunjwa et al., 2025).

The significant relationship between student participation and cultural appreciation suggests that active involvement in traditional games is strongly associated with students' recognition and appreciation of Filipino cultural heritage. Participation allows students to experience the rules, practices, and cultural meanings of traditional games rather than merely learning about them theoretically. Traditional games can therefore serve as culturally meaningful curriculum resources within physical education (Bonato et al., 2024; Wicahyani et al., 2025).

Student participation also demonstrated a very strong relationship with motivation and participation (r = 0.795, p < 0.001). This finding indicates that students who are more actively involved in traditional game activities tend to report more positive motivational experiences. Meaningful and enjoyable physical activity experiences can support students' motivation and continued engagement in physical education (Llanos-Muñoz et al., 2023; Ryan et al., 2021).

The strong relationship with social interaction and teamwork indicates that active participation in traditional games is closely associated with students' cooperation, communication, shared responsibilities, and peer interaction. Traditional games commonly involve group participation and shared rules, providing opportunities for students to interact and cooperate with classmates (Çinar & Hassani, 2026; Lavega-Burgués et al., 2023).

Overall, the findings demonstrate that student participation during traditional Filipino game activities has a significant and very strong positive relationship with all four dimensions of student outcomes. Therefore, the null hypothesis is rejected for physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. The findings emphasize the importance of active student involvement in maximizing the physical, cultural, motivational, and social outcomes associated with traditional Filipino games in PATHFit.

Table 26. *Relationship Between Alignment with Course Learning Outcomes and Students' Outcomes*

Extent of Integration of Traditional Filipino Games in PATHFit	Level of Students Outcomes	R-value	N	P-value	Remarks	Decision
Alignment with Course Learning Outcomes	Physical Engagement	0.842	368	<0.001	Significant	Reject the Ho
	Cultural Appreciation	0.870	368	<0.001	Significant	Reject the Ho
	Motivation and Participation	0.817	368	<0.001	Significant	Reject the Ho
	Social Interaction and Teamwork	0.861	368	<0.001	Significant	Reject the Ho

Table 26 presents the relationship between alignment with course learning outcomes and the level of student outcomes. The results reveal significant positive relationships across all four dimensions. Alignment with course learning outcomes is significantly related to physical engagement (r = 0.842, p < 0.001), cultural appreciation (r = 0.870, p < 0.001), motivation and participation (r = 0.817, p < 0.001), and social interaction and teamwork (r = 0.861, p < 0.001). Since all p-values are below the 0.05 level of significance, the null hypothesis is rejected for all dimensions.

The correlation coefficients range from 0.817 to 0.870, indicating very strong positive relationships. This suggests that stronger alignment of traditional Filipino games with PATHFit course learning outcomes is strongly associated with higher levels of student outcomes. The strongest relationship was found between alignment with course learning outcomes and cultural appreciation (r = 0.870), followed by social interaction and teamwork (r = 0.861), physical engagement (r = 0.842), and motivation and participation (r = 0.817).

The strongest relationship with cultural appreciation indicates that when traditional Filipino games are meaningfully connected to course learning outcomes, students may have greater opportunities to recognize the cultural significance, values,

and traditions associated with the activities. Traditional games can serve as curriculum resources that integrate physical activity with cultural learning and appreciation (Bonato et al., 2024; Wicahyani et al., 2025).

The significant relationship with physical engagement suggests that aligning traditional games with physical education outcomes may be associated with students' active involvement in movement-based activities. Traditional games can incorporate running, jumping, agility, coordination, and other forms of physical activity that support physical education objectives (Fauzi et al., 2024; Mathunjwa et al., 2025).

Similarly, the very strong relationship between alignment with learning outcomes and motivation and participation ($r = 0.817$, $p < 0.001$) indicates that students may be more engaged when they can experience a clear connection between the activities they perform and the intended learning goals. Meaningful and appropriately structured physical education experiences can support students' motivation and continued participation (Llanos-Muñoz et al., 2023; Ryan et al., 2021).

The relationship with social interaction and teamwork was also very strong ($r = 0.861$, $p < 0.001$). This suggests that when traditional games are aligned with learning outcomes involving cooperation, fair play, communication, and teamwork, students' social experiences may be enhanced. Traditional games can provide opportunities for cooperative interaction and the development of social skills through shared activities and rules (Çinar & Hassani, 2026; Lavega-Burgués et al., 2023).

Overall, the findings demonstrate that alignment with course learning outcomes has a significant and very strong positive relationship with all four dimensions of student outcomes. Therefore, the null hypothesis is rejected for physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. The findings emphasize the importance of intentionally connecting traditional Filipino games with the intended learning outcomes of PATHFit to support students' physical, cultural, motivational, and social development.

1. In terms of age, the majority of respondents were 18–19 years old, comprising 241 students (65.5%), followed by those aged 20–21 years old with 121 (32.9%). In terms of sex, 204 (55.4%) were male and 164 (44.6%) were female. Regarding year level, second-year students constituted the largest group with 180 respondents (48.9%), followed by first-year students with 102 (27.7%). In terms of college/program, Information Technology/Computing had the highest representation with 206 respondents (56.0%), followed by Engineering Technology with 96 (26.1%).
2. The integration of traditional Filipino games was generally assessed as Integrated to Highly Integrated across the five dimensions. Frequency of implementation obtained a General Assessment Mean of 3.17 (Integrated), while variety of games introduced obtained 3.20 (Integrated). Instructional strategies used obtained 3.36 (Highly Integrated), student participation during activities obtained 3.31 (Highly Integrated), and alignment with course learning outcomes obtained the highest assessment of 3.37 (Highly Integrated).
3. The student outcomes were generally assessed as Strongly Agree across all four dimensions. Physical engagement obtained a General Assessment Mean of 3.36, cultural appreciation obtained 3.38, motivation and participation obtained 3.32, and social interaction and teamwork obtained 3.35. These findings indicate generally favorable student outcomes associated with the integration of traditional Filipino games in PATHFit.
4. Significant differences in the extent of integration were found when respondents were grouped by age and year level. By age, frequency of implementation ($F(2, 365) = 5.61$, $p = 0.004$) and variety of games introduced ($F(2, 365) = 4.18$, $p = 0.016$) differed significantly, with students aged 20–21 years old ($M = 3.40$) rating higher than those aged 18–19 years old ($M = 3.22$), while no significant differences were found in instructional strategies, student participation, and alignment with course learning outcomes. By year level, frequency of implementation ($F(3, 364) = 4.50$, $p = 0.004$) and variety of games introduced ($F(3, 364) = 3.62$, $p = 0.013$) differed significantly, with fourth-year students ($M = 3.85$) giving the highest ratings, although this group was small ($n = 12$); the other three dimensions did not differ significantly. Sex (t-test) and college/program (ANOVA) showed no significant differences in any dimension of integration.
5. By age, all four dimensions of student outcomes differed significantly: physical engagement ($F(2, 365) = 3.17$, $p = 0.043$), cultural appreciation ($F(2, 365) = 3.75$, $p = 0.024$), motivation and participation ($F(2, 365) = 3.68$, $p = 0.026$), and social interaction and teamwork ($F(2, 365) = 4.41$, $p = 0.013$), with students aged 20–21 years old ($M = 3.49$) reporting higher outcomes than those aged 18–19 years old ($M = 3.28$). By year level, physical engagement ($F(3, 364) = 2.98$, $p = 0.031$) and cultural appreciation ($F(3, 364) = 2.80$, $p = 0.040$) differed significantly, with fourth-year students ($M = 3.87$) reporting the highest outcomes, while motivation and participation and social interaction and teamwork did not differ significantly. Sex and college/program showed no significant differences in any of the four dimensions of student outcomes.
6. All five dimensions of traditional Filipino game integration demonstrated significant positive relationships with all four dimensions of student outcomes. Frequency of implementation showed strong relationships with student outcomes, with r-values ranging from 0.707 to 0.732. Variety of games introduced showed r-values from 0.735 to 0.751. Instructional

strategies used showed r-values from 0.794 to 0.813, while student participation during activities showed r-values from 0.795 to 0.814. Alignment with course learning outcomes demonstrated the strongest relationships, with r-values ranging from 0.817 to 0.870. All relationships were significant at $p < 0.001$, resulting in the rejection of the corresponding null hypotheses.

1. The respondents were predominantly 18–19 years old, male, second-year students, and enrolled in Information Technology/Computing programs. Thus, the findings primarily reflect the experiences of students within these predominant profile categories.
2. Traditional Filipino games were generally Integrated to Highly Integrated in PATHFit. Frequency of implementation and variety of games introduced were rated Integrated, while instructional strategies used, student participation during activities, and alignment with course learning outcomes were rated Highly Integrated. This indicates that traditional Filipino games were incorporated into PATHFit through planned instruction, active participation, and connections to course outcomes.
3. The students demonstrated high levels of outcomes in all four dimensions—physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. This indicates that the integration of traditional Filipino games was accompanied by favorable student experiences across physical, cultural, motivational, and social dimensions.
4. The extent of integration of traditional Filipino games differed significantly according to age and year level in terms of frequency of implementation and variety of games introduced, with older students and fourth-year students giving higher ratings, while no significant differences were found in instructional strategies used, student participation during activities, and alignment with course learning outcomes. Sex and college/program did not produce significant differences in any dimension. Therefore, the extent of integration was generally consistent across sex and academic programs, although perceptions of frequency and variety varied somewhat by age and year level.
5. Student outcomes differed significantly by age in all four dimensions—physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork—and by year level in physical engagement and cultural appreciation, while sex and college/program were not associated with significant differences. Thus, among the profile variables examined, age was the characteristic most consistently associated with differences in student outcomes, while the year-level differences should be interpreted with caution given the small fourth-year group.
6. The five dimensions of integration—frequency of implementation, variety of games introduced, instructional strategies used, student participation during activities, and alignment with course learning outcomes—all demonstrated significant positive relationships with physical engagement, cultural appreciation, motivation and participation, and social interaction and teamwork. Hence, the corresponding null hypotheses were rejected. The findings indicate that stronger integration of traditional Filipino games in PATHFit is associated with more favorable student outcomes, particularly when the games are intentionally taught, actively participated in, and aligned with course learning outcomes.

1. Students are encouraged to actively participate in traditional Filipino game activities in PATHFit and recognize these activities as opportunities not only for physical engagement but also for cultural appreciation, motivation, cooperation, and teamwork. Active participation may help maximize the learning benefits associated with culturally meaningful physical education experiences.
2. PATHFit instructors are encouraged to sustain and strengthen the integration of traditional Filipino games through regular implementation, greater variety of games, appropriate instructional strategies, and active student participation. Instructors should also provide clear demonstrations, instructions, feedback, safety reminders, and opportunities for role rotation to promote inclusive and meaningful participation. Instructors should also ensure that younger and lower-year students experience traditional games with the same regularity and variety as older and higher-year students.
3. University administrators may use the findings as a basis for strengthening the implementation of PATHFit through institutional support for traditional Filipino game activities. This may include providing appropriate facilities, equipment, instructional resources, and professional development opportunities that enable instructors to implement culturally responsive and learner-centered physical education practices.
4. Physical education program developers may consider incorporating traditional Filipino games more explicitly into PATHFit curriculum materials, lesson plans, and instructional guidelines. Particular attention may be given to aligning the games with course learning outcomes related to physical fitness, movement skills, cultural appreciation, teamwork, fair play, and healthy lifestyle practices.
5. Future researchers may conduct similar studies using larger and more diverse samples, other higher education institutions, and additional variables related to culturally responsive physical education. Experimental, longitudinal, or multi-institutional studies may also be undertaken to further examine the effectiveness and sustainability of traditional Filipino games in promoting student outcomes. Future studies may also include more balanced representation across age

groups, year levels, and programs, given the small number of fourth-year students and of respondents in some programs in the present study.

6. The findings may be considered in developing institutional initiatives that promote culturally responsive and inclusive physical education. Strengthening the use of traditional Filipino games in PATHFit may contribute to broader educational priorities concerning quality education, cultural awareness, physical activity, and holistic learner development, consistent with the direction of SDG 4 (Quality Education) and AmBisyon Natin 2040.

Practical Output



Figure 2. *Proposed PATHFit Traditional Filipino Games Integration / Program Framework*

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