

Coaching Techniques and Student-Athletes' Performance in Football and Futsal: Basis for a Sports Development Plan

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ABSTRACT: This study examines the level of effectiveness of coaching techniques in enhancing sports performance in football and futsal within the Division of Lipa City, Batangas. Recognizing the vital role of coaching in the development of student-athletes, the research explores key aspects such as performance improvement, emotional support, teamwork enhancement, and personal development. Furthermore, it assesses how coaching contributes to cognitive performance, team synergy, physical health and injury management, and game skills execution. Using descriptive-quantitative approaches, data were gathered from student-athletes, coaches, and trainers to provide a holistic understanding of the current practices and their outcomes. Findings reveal that effective coaching techniques significantly influence not only athletic performance but also the emotional and academic balance of student-athletes. Coaches and trainers play a pivotal role in refining technical skills, fostering discipline, and strengthening teamwork, while schools serve as crucial partners in ensuring holistic growth and sustainability of sports programs. The study underscores the need for evidence-based coaching strategies, structured training programs, and continuous professional development for coaches and trainers. The implications extend to student-athletes, schools, trainers, and policymakers by providing actionable insights for improving coaching practices and sustaining football and futsal development. Additionally, the research contributes to the body of literature on sports coaching in the Philippine context and offers a foundation for future comparative and longitudinal studies.

KEYWORDS: coaching techniques, emotional support, football, futsal, sports performance

I. INTRODUCTION

Recent years have seen a significant increase in interest in the analysis of sports performance, suggesting a more thorough understanding of the different elements influencing an athlete's success. Because human performance is complex, this interest extends beyond sports science and physical education to psychology, nutrition, and health sciences. A well-rounded and skilled sports coach appears to be a multifaceted individual with a broad variety of interpersonal, technical, and communication abilities.

Sports, however, have a big impact on people's lives. Students' participation in amateur sports competitions has been rising in recent years. Early involvement in various sports has favorable impacts, improves their healthy lifestyle, and keeps them from engaging in harmful behaviors (Jabar, Wahid & Abdul, 2022). Therefore, it is considered essential to evaluate the factors that affect and contribute to student-athletes' performance in order to improve and increase their performance, particularly in sporting events.

The Philippine Sports Commission (PSC) recognizes that sports are not merely physical activities but powerful tools for advancing values, fostering human progress, promoting peace, strengthening social cohesion, and driving nation-building. As Nelson Mandela emphasized during the inaugural Laureus World Sports Awards, sport has the power to inspire, unite people, and communicate with the youth in a way that transcends barriers. This vision resonates with the UNESCO International Charter on Physical Education and Sport, to which the Philippines is a signatory. The Charter affirms that participation in physical education, physical activity, and sport is a fundamental right of all. It underscores that these activities bring wide-ranging benefits to individuals, communities, and society at large. Moreover, it calls for collective action among stakeholders to create a shared strategic vision, inspire lifelong participation, ensure sustainability, and uphold safety, integrity, and ethical values in sports programs. It further emphasizes the importance of research and evaluation, the role of qualified coaches and administrators, the need for adequate facilities, and the potential of sports to contribute to peace, development, and international cooperation.

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As a result, the Philippine Football Federation (PFF), the nation's football governing body, oversees football in the Philippines. In the Philippines, almost 40 million individuals, or 35% of the total population, are football fans. In the Philippines, football is a national sport that is practiced at both professional and amateur levels. When the British brought football to the Spanish and European inhabitants on the islands in the 1890s, the sport's rich and lengthy history began.

Britton, Hill, and Ward (2020) assert that if tens of millions of young athletes compete in sports all year long, then a significant number of them are interacting with different coaches. Other sports-related stakeholders need to learn more in order to comprehend how coaches develop their coaching philosophies and the effects those philosophies have on the players with whom they are linked. Regardless of the participants' age, sport, or ability level, a coach can adopt any of a variety of coaching philosophies to lead a team of athletes. There are distinct behaviors and qualities associated with each coaching style, which can have varying consequences on the athletes they have been associated with. The two main styles of coaching that have been recognized in sports are the autonomy-supportive styles and the controlling style.

Deci and Ryan's (2020) study on self-determination theory examined a number of psychological requirements of athletes that, if unmet, could lead to unfavorable results. When discussing the substantial impact on athlete motivation and performance, it is essential that coaches have a thorough understanding of the traits and behaviors of the athletes in order to implement various coaching philosophies. Coaches that advocate autonomy are typically approachable and upbeat.

In Division of Lipa City in the province of Batangas, all coaches have their own unique coaching style and the way it is implemented will affect their athletes' performance. Football and futsal is the sports participated in district, division and regional competition.

In liu, the researcher wanted to analyze the coaching techniques and determine the sports performance of the athletes. According to Marcone (2021), coaching techniques can have a profound effect on an athlete's motivation and performance, either meeting or failing to meet their psychological demands. It argues that new studies have demonstrated that an autonomy-supportive coaching approach meets athletes' demands and leads to better overall performance and progress.

In a similar vein, Jones (2020) looked into several coaching philosophies and how they affected athletes. The multidimensional model for leadership and the sport leadership scale were used to determine the most effective coaching philosophies. Jones (2020) found that youth and high school athletes prevailed most under democratic and social support coaching styles; in college athletes, it was suggested that a democratic style of coaching led to more team cohesion and freedom. In a similar study, Brinton et al. (2021) revealed that authoritative coaching styles were a significant predictor of autonomy and competence by the athlete. An authoritarian coaching style was a significant negative predictor of athlete autonomy levels (Brinton et al., 2021).

Research Question

This study aimed to determine the level of effectiveness of coaching techniques in sports performance of student-athletes in Football and Futsal in the Division of Lipa City, province of Batangas.

It sought to answer the following questions:

1. What is the demographic profile of the respondents in terms of:
 - 1.1 age;
 - 1.2 sex; and
 - 1.3 grade level?
2. What is the level of effectiveness of coaching techniques in sports performance in Football and Futsal in Division of Lipa City in the province of Batangas in terms;
 - 2.1 performance improvement;
 - 2.2 emotional support;
 - 2.3 teamwork improvement; and
 - 2.4 personal development?
3. What is the extent of Sports performance of the student-athletes in terms of:
 - 3.1 Cognitive Performance;
 - 3.2 Team Synergy;
 - 3.3 Physical Health and Injury Management; and
 - 3.4 Game Skills Execution?
4. Is there a significant difference on the level of effectiveness of coaching techniques in sports performance in Football and Futsal when grouped according to profile?

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- 5. Is there a significant difference on the extent of Sports performance of the student-athletes when grouped according to profile?
- 6. Is there a significant relationship between the level of effectiveness of coaching techniques in sports performance in Football and Futsal and extent of Sports performance of the student-athletes?
- 7. Based on the findings of the study, what sports development plan may be proposed?

Scope and Limitation of the Study

The study concentrated on examining the level of effectiveness of coaching techniques in the sports performance of student-athletes in Football and Futsal within the Division of Lipa City, Batangas. It involved a total of one hundred (100) student-athletes, spanning Grade 4 to Grade 6 from the Elementary level, Grade 7 to Grade 10 from the Junior High School level, and Grade 11 to Grade 12 from the Senior High School level. While the study covers a wide range of respondents, certain limitations are inherent in its design and methodology.

By utilizing a descriptive research design with quantitative methods, the study provides measurable insights but does not fully capture the deeper, qualitative experiences of the student-athletes in Football and Futsal.

Furthermore, reliance on researcher-made questionnaires and instruments adapted from previous studies may pose potential biases and constraints in terms of validity and reliability of measurement. Despite these limitations, the study contributed meaningful findings that can inform and strengthen the formulation and implementation of a sports development plan aimed at enhancing coaching practices and athletic performance in football and futsal.

II. FRAMEWORK

The conceptual framework of the study encompasses various key elements aimed at understanding the level of effectiveness of coaching techniques in sports performance in Football and Futsal in Division of Lipa City in the province of Batangas.

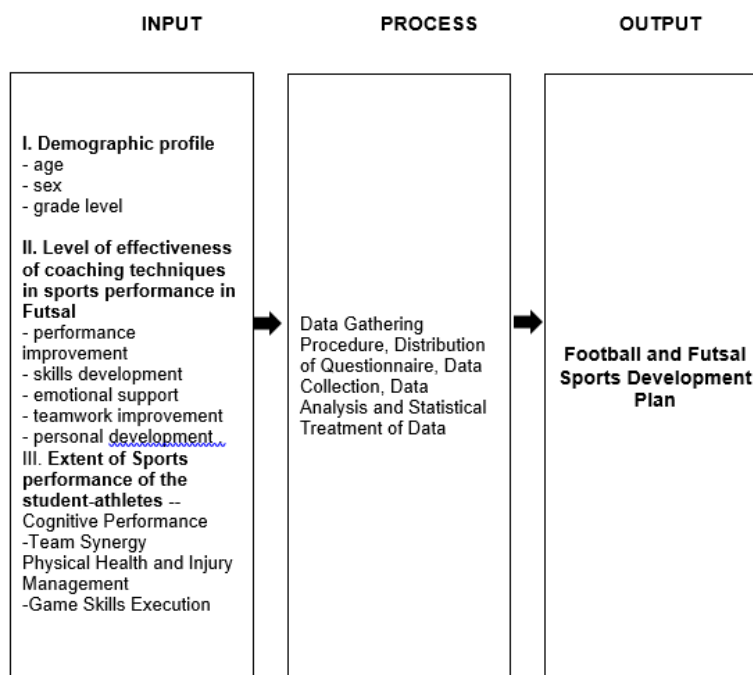


Figure 1. Research Paradigm

The conceptual framework of this study is anchored on the Input-Process-Output (IPO) Model, which systematically outlines the flow of the research.

In the Input phase, the study considers the demographic profile of the respondents, specifically their age, sex, grade level, and sports involvement. It also includes the level of effectiveness of coaching techniques in sports performance within the Division of Lipa City, Batangas, as measured across five dimensions: performance improvement, skills development, emotional support, teamwork improvement, and personal development.

In the Process phase, the research highlights the methodological steps undertaken, namely the data-gathering procedure, distribution of questionnaires, data collection, data analysis, and statistical treatment of data. These steps ensure that the information obtained is reliable, valid, and systematically analyzed.

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Finally, in the Output phase, the study aims to develop a sports development plan designed to enhance coaching practices and optimize student-athletes' performance outcomes for football and futsal.

Research Design

The study's selection of descriptive-quantitative as the preferred method aligned with analyzing to determine the level of effectiveness of coaching techniques in sports performance in Football and Futsal in the Division of Lipa City, province of Batangas. This method, which focused on the nature and status of individuals, items, circumstances, occurrences, or any phenomenon, was well-suited for obtaining statistical results from the overall population of specific research objects and expressing information in numerical terms. Its cost-effectiveness and ability to yield precise results from a manageable number of respondents made it an appropriate choice for this study.

Data was collected through a survey form administered to selected respondents, facilitating the acquisition of quantitative data. The descriptive survey research process underwent beyond data collection and tabulation, involving the interpretation of the results' meaning and relevance. This approach was particularly suitable for determining the level of effectiveness of coaching techniques in sports performance in Football and Futsal in the Division of Lipa City, province of Batangas, aiming to obtain statistical results from the overall population of specific research objects and express information numerically.

However, it was crucial to consider the inherent uncertainty associated with quantitative research results, especially regarding the level of effectiveness of coaching techniques in sports performance of student-athletes in Football and Futsal in the Division of Lipa City, province of Batangas. This consideration aligned with the need to critically evaluate the statistical findings and their implications for the study assessment.

Respondents of the Study

The selection of respondents for this study on determining the level of effectiveness of coaching techniques in sports performance in Football and Futsal involved a deliberate and purposeful approach. The study comprised a group of 100 student-athletes within Division of Lipa City in the province of Batangas who were actively coaching their respective sports disciplines. This specific group of respondents was intentionally chosen as a representative sample from the larger population of student-athletes of the said school.

The rationale behind selecting 100 respondents were influenced by factors such as performance improvement, skills development, emotional support, teamwork improvement and personal development.to achieve a balance between sample size and statistical significance. This number was sufficient to draw meaningful conclusions and patterns from the collected data without being too overwhelming for analysis.

Research Instrument

The main instrument used to gather data for this study was a survey questionnaire created by the researcher. A survey questionnaire was used as the research tool in order to collect the data needed for the investigation. The researcher's readings, earlier research, and specialized literature pertinent to the subject served as the foundation for the questionnaire's structure.

The primary instrument for gathering adequate data and information from the subjects of this study was a validated researcher-made questionnaire. The questionnaire was divided into three parts: Part I consisted of the demographic profile of the respondents in terms of age, sex, and grade level. Part II included the level of effectiveness of coaching techniques in sports performance in Division of Lipa City in the province of Batangas such as performance improvement, skill development, emotional support, teamwork improvement, and personal development.

The respondents were asked to place a checkmark on their chosen responses from the given scale. A four-point rating scale was used to determine each part of the questionnaire. Each of the answers in the questionnaire was weighted as follows, with the verbal interpretation of 4 as Always, 3 as Often, 2 as Sometimes, and 1 as Never.

Data Gathering

Throughout the investigation, the researcher used a number of crucial procedures. The researcher first presented the instrument they had created on their own to their mentor for face validation following the colloquium. The researcher also asked the Lipa City, Batangas province's Schools Division for authorization.

After receiving consent, the researcher gave the respondents precise instructions on how to fill out the surveys. The researcher made it easier to distribute and retrieve the surveys, and before responding, the participants were given a thorough explanation of the goals and procedures of the study.

The gathered data was then subjected to the proper statistical analysis, analysis, and interpretation. Using Microsoft Excel and SPSS 25, the data was tallied and coded before undergoing a number of statistical analyses.

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Statistical Treatment

The researcher was responsible for generating the data, which was categorized according to the problems formulated in the research design. The collected data underwent a series of statistical treatments to ensure clear and precise analysis. To address Problem 1, the study utilized frequency counts and percentage calculations to understand the responses' distribution comprehensively.

In addressing Problems 2 and 3, weighted means were employed to provide a more nuanced evaluation of the central tendencies of the data.

To explore potential significant differences among variables in Problems 4, 5, and 6, depending on the nature of the data and research questions. These tests were valuable tools for identifying meaningful variations between groups or conditions.

III. RESULTS

This chapter presents, interprets, and analyzes the data gathered from the respondents regarding the effects of school-based sports coaching programs on the physical fitness, sports performance, and general well-being of student-athletes. The data are organized in accordance with the specific research questions of the study. Results are presented in tables and figures, followed by interpretation and analysis to provide a deeper understanding of the findings.

SOP1. What is the demographic profile of the respondents in terms of:

Table 1.1 Demographic profile of the respondents in terms of age

AGE	Frequency	Percentage
10 – 12 years old	20	20.00
13 – 15 years old	50	50.00
16 - 18 years old	26	26.00
18 years old and above	4	4.00
Total	100	100

According to Table 1.1, the data shows that the majority of respondents are aged 13–15 years old, making up 50.00% of the total population. This is followed by those aged 16–18 years old (26%). Meanwhile, 20% of the participants are younger, belonging to the 10–12 years old bracket. The smallest group is composed of respondents 18 years old and above, representing only 4% of the total.

This indicates that the sample is predominantly composed of early to mid-adolescents, which reflects the typical age range of high school student-athletes actively engaged in school-based football and futsal programs. The dominance of this age group suggests that formative athletic development and exposure to coaching techniques occur most strongly during this stage.

The results highlight that football and futsal, as a school-based sport, attracts participants mostly in their early to mid-teen years, when physical development, motor skills, and social interaction are rapidly progressing. According to sports development theories, this is also the sensitive period for skill acquisition, making coaching techniques highly influential in shaping performance.

The presence of 20% younger players (10–12 years old) also suggests early specialization, which can be both beneficial for skill mastery and risky if not balanced with proper physical and psychological training. On the other hand, the low percentage (4%) of 18 years old and above may imply that student-athletes at this age either transition to other competitive levels, prioritize academics, or face challenges balancing sports and senior high school workloads.

Côté & Vierimaa (2024) emphasized that adolescence is a critical stage for sport participation, where effective coaching fosters not only physical skills but also motivation and long-term engagement in sports.

Balyi & Hamilton (2024) in their Long-Term Athlete Development (LTAD) Model argue that early to mid-adolescence is the "training to train" stage, where athletes respond best to structured coaching, technical drills, and tactical exposure.

In a Philippine context, Garcia & Villanueva (2020) noted that secondary-level student-athletes often peak in performance between ages 13–17 due to increased school-based competitions, highlighting the need for age-appropriate coaching techniques.

These findings affirm that the respondents' age profile in this study is well-situated within the developmental stage most receptive to coaching interventions, making the data highly relevant to the creation of a sports development plan for football and futsal.

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Table 1.2 Demographic Profile of the Respondents in terms of Sex

SEX	Frequency	Percentage
MALE	83	83.00
FEMALE	17	17.00
Total	100	100

According to Table 1.2, the data reveals that the majority of respondents are male, with a frequency of 83 or 83% of the total population. On the other hand, female respondents make up only 17%, indicating a significantly lower participation compared to their male counterparts.

This suggests that football and futsal, as a competitive school-based sport, is still male-dominated in the study context. The data reflects not only cultural perceptions of football and futsal as a male-oriented sport but also the possible lack of opportunities, encouragement, or representation for female athletes in this field.

The dominance of male participants in the study highlights how gender differences influence sports participation. Futsal, like football and other related sports, is often perceived as requiring physical strength, speed, and endurance—qualities stereotypically associated with male athletes. This may explain the larger proportion of male respondents.

However, the presence of female participants, though smaller in number, reflects a growing inclusivity in futsal. With increasing recognition of women's futsal leagues and programs in both local and international levels, the 17% female representation suggests potential areas for gender-balanced sports development plans.

Cameron (2020) noted that gender disparities remain evident in sports participation, with male athletes generally receiving more encouragement and institutional support, particularly in team sports such as futsal, football, and basketball.

Seabra et al. (2021) found that male adolescents are more likely to engage in high-intensity, competitive sports, while females often face social and cultural barriers that limit their participation in such activities.

In the Philippine context, de Guzman & Palarca (2020) observed that futsal is still predominantly male-driven in schools, although programs promoting women's participation have been slowly emerging due to advocacy for gender equality in sports.

Similarly, Martins et al. (2019) emphasized that female participation in futsal fosters not only athletic skills but also empowerment, challenging traditional gender norms in sports.

The findings of this study confirm existing literature that futsal remains a male-dominated sport. Nevertheless, the presence of female respondents, though fewer, opens opportunities for promoting inclusive sports development programs that encourage participation across genders.

Table 1.3 Demographic Profile of the Respondents in terms of Grade Level

GRADE LEVEL	Frequency	Percentage
ELEMENTARY	20	20.00
JUNIOR HIGH SCHOOL	50	50.00
SENIOR HIGH SCHOOL	30	30.00
Total	100	100

According to Table 1.3, the data shows that half of the respondents (50%) are in junior high school, making it the largest group among the participants. This is followed by senior high school students, who comprise 30%, while the smallest group consists of elementary pupils, representing 20% of the total.

This indicates that the majority of participants are in the middle stage of their basic education, where student-athletes are more actively involved in school sports programs. The significant representation of junior high school students also suggests that football and futsal participation peaks during this stage, aligning with the age bracket (13–15 years old) identified in Table 1.1 as the largest group.

The results highlight the central role of junior high school in fostering athletic involvement, particularly in futsal. At this stage, students are typically introduced to structured training programs and more competitive school-based sports. The 30% senior high school representation suggests that some athletes continue their participation as they progress academically, but others may face academic priorities or other commitments that limit sports engagement.

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The 20% elementary participation reflects early exposure to football and futsal, which can be beneficial in terms of skill development and motor coordination. However, participation at this level is usually less competitive and more focused on physical education or introductory training, unlike in higher grade levels where structured competitions are emphasized.

Balyi and Hamilton (2021), in their Long-Term Athlete Development (LTAD) Model, identified the junior high school years as the “training to train” phase, a critical period when athletes refine fundamental skills and respond most effectively to systematic coaching techniques.

This aligns with the Philippine Sports Commission (2022), which reported that the majority of grassroots football and futsal programs and school-based tournaments are directed toward junior high school students, emphasizing this stage as the most active period for nurturing young futsal players.

Similarly, Gutiérrez et al. (2021) highlighted that although elementary pupils benefit from early exposure to the sport, it is during the junior high school years that athletes begin to exhibit stronger competitive performance, thereby making targeted coaching interventions more impactful and essential for long-term athletic development.

This evidence underscores the importance of designing age-appropriate coaching strategies that focus on skill refinement, tactical understanding, and competitive preparedness during junior high school. Sports program coordinators and school administrators can prioritize resources and training opportunities for this age group to maximize performance outcomes. Coaches are encouraged to implement structured, progressive training plans and monitor athlete development systematically, ensuring that interventions align with both physical and cognitive growth stages. Additionally, early identification of talent and consistent support during this period can enhance long-term athlete retention, reduce the risk of burnout, and foster a sustainable pipeline of skilled football and futsal players.

SOP 2. What is the level of effectiveness of coaching techniques in sports performance in Football and Futsal in Division of Lipa City in the province of Batangas in terms;

2.1 Level of effectiveness of coaching techniques in sports performance in football and futsal in the Division of Lipa City, province of Batangas in terms of performance improvement;

Indicators	Mean	Verbal Interpretation
1. My coach's drills improve my passing, dribbling, and shooting accuracy.	3.35	VE
2. Feedback from my coach helps me correct mistakes quickly.	2.86	E
3. My coach individualizes training based on my performance data.	3.00	E
4. Video or play-by-play reviews from my coach improve my game understanding.	2.75	E
5. My coach's periodized training boosts my endurance and speed for futsal.	2.86	E
6. My coach uses small-sided, game-like drills that mirror match situations.	3.06	E
7. My coach tracks objective metrics (e.g., pass completion, shot conversion, heart rate) to adjust my training.	2.75	E
8. My coach sets constraints in practice to sharpen my decisions under pressure.	3.13	E
9. My coach integrates position-specific strength and mobility work for futsal movements.	3.05	E
10. My coach assigns targeted micro-drills I can practice on my own between sessions.	3.00	E
General Mean	2.98	Effective
Legend:		
3.25 - 4.00 Very Effective (VE)	2.50 - 3.24 Effective (E)	
1.75 - 2.49 Slightly Effective (SE)	1.00 - 1.74 Not Effective	
(NE)		

Table 2.1 presents the level of effectiveness of coaching techniques in sports performance in football and futsal in terms of performance improvement. The overall assessment yielded a general mean of 2.98, verbally interpreted as Effective (E). This indicates that the coaching strategies being applied are generally beneficial to the athletes' performance development in football and futsal.

The highest-rated indicator was “My coach's drills improve my passing, dribbling, and shooting accuracy” with a mean of 3.35 (Very Effective). This suggests that skill-based drills are perceived as the most impactful component of training, directly enhancing the core technical abilities essential for futsal.

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On the other hand, the lowest-rated indicators were "Video or play-by-play reviews from my coach improve my game understanding" and "My coach tracks objective metrics to adjust my training", both with a mean of 2.75 (Effective). This implies that while these coaching strategies are still useful, they are less emphasized compared to hands-on technical drills, possibly due to limited resources or lack of consistent integration of technology and performance analytics in the training process.

The results highlight that football and futsal players value direct, skill-focused coaching techniques more than analytical or technology-driven methods. This aligns with the nature of football and futsal, which emphasizes quick decision-making, ball control, and technical accuracy in a fast-paced environment. Coaches' reliance on repetitive drills and practice games seems to resonate well with athletes, leading to noticeable improvements in performance.

The relatively lower ratings of video analysis and objective tracking metrics may reflect their under-utilization in school-based football and futsal programs, where resources such as video playback systems, wearable performance trackers, or statistical analysis tools are less accessible. Incorporating these methods more consistently could further enhance players' tactical awareness and performance monitoring, complementing traditional skill drills.

Sarmento et al. (2020) emphasized that football and futsal training programs are most effective when they balance technical drills with tactical awareness strategies, including video analysis for improving decision-making.

Cushion, Armour, & Jones (2022) noted that while traditional drills remain highly effective, modern coaching increasingly integrates performance feedback tools such as play-by-play reviews to deepen players' understanding of the game.

In the Philippine context, Cruz & Roxas (2021) reported that football and futsal coaches in schools often prioritize technical drills due to resource limitations, with less focus on data-driven coaching methods like video breakdowns or metric-based tracking.

The findings in this study therefore confirm that technical drills are the cornerstone of performance improvement in football and futsal coaching, but also point to the need for integrating modern analytical approaches to maximize player development.

2.2 Level of effectiveness of coaching techniques in sports performance in Football and Futsal in Division of Lipa City in the province of Batangas in terms of emotional support;

Indicators	Mean	Verbal Interpretation
1. My coach motivates me after errors or losses.	3.20	E
2. My coach recognizes and praises genuine effort and progress.	2.90	E
3. My coach is approachable when I need help or advice.	3.27	VE
4. My coach helps me manage pre-game nerves and pressure.	2.94	E
5. My coach creates a supportive environment where I feel valued.	2.86	E
6. My coach teaches pre-performance routines (breathing, visualization) to handle stress.	3.06	E
7. My coach checks in on my well-being and workload outside of training when needed.	2.75	E
8. My coach sets clear, fair expectations that reduce uncertainty before games.	3.05	E
9. My coach helps me turn mistakes into specific, short-term learning goals.	3.07	E
10. My coach keeps communication calm and constructive during high-pressure moments.	2.84	E
General Mean	2.99	Effective
Legend:		
3.25 - 4.00 Very Effective (VE)		
2.50 - 3.24 Effective (E)		
1.75 - 2.49 Slightly Effective (SE)		
(NE)		
1.00 - 1.74 Not Effective		

Table 2.2 shows the level of effectiveness of coaching techniques in terms of emotional support. The general assessment yielded a mean score of 2.99, interpreted as Effective (E), suggesting that coaches' support in managing players' mental and emotional well-being is generally beneficial to futsal athletes. The highest-rated indicator was "My coach is approachable when I need help or advice" with a mean of 3.27 (Very Effective). This highlights that openness and accessibility are the strongest aspects of the coach's emotional support, fostering trust and a safe space for athletes.

The lowest-rated indicator was "My coach checks in on my well-being and workload outside of training when needed" with a mean of 2.75 (Effective). This suggests that while athletes appreciate in-training support, coaches are less likely to extend concern beyond the training environment, reflecting limited attention to external stressors such as academics, family, or personal

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issues. The findings show that football and futsal athletes perceive their coaches as supportive and approachable, which positively contributes to their confidence and motivation during training and competition. Emotional support, especially when athletes feel discouraged, is crucial in sustaining participation and enhancing performance.

However, the relatively lower rating for outside-of-training check-ins suggests that coaches may not be consistently monitoring athletes' holistic well-being. Since many student-athletes balance academic demands with sports participation, overlooking external stressors may affect their performance and overall development. Incorporating structured check-ins or mentorship beyond training could improve athletes' resilience and long-term engagement.

Mageau & Vallerand (2023) highlighted that coaches who provide autonomy support and emotional encouragement foster intrinsic motivation, leading to better athletic engagement. Horn (2020) explained that coaches' emotional support reduces anxiety, increases self-confidence, and helps athletes cope with performance-related stress. In the Philippine setting, Santos & Villareal (2020) found that student-athletes thrive under coaches who balance technical guidance with emotional care, as this dual approach improves both athletic outcomes and academic persistence. These findings reinforce that emotional support is a vital dimension of coaching effectiveness, and while futsal athletes recognize their coaches' accessibility and encouragement, there is still room for enhancing holistic well-being monitoring.

2.3 Level of effectiveness of coaching techniques in sports performance in Football and Futsal in Division of Lipa City in the province of Batangas in terms of teamwork improvement;

Indicators	Mean	Verbal Interpretation
1. My coach organizes activities that build trust among teammates.	3.15	E
2. My coach teaches clear on-court communication cues (e.g., press, switch).	2.86	E
3. My coach assigns roles that complement each player's strengths.	3.00	E
4. My coach resolves team conflicts fairly and quickly.	2.75	E
5. My coach fosters unselfish play and ball movement.	2.86	E
6. My coach leads structured post-match debriefs with shared action points for the team.	3.06	E
7. My coach rotates leadership roles to build shared responsibility among players.	2.75	E
8. My coach establishes team standards and rituals that reinforce cooperation.	3.24	E
9. My coach uses positional rondos and pattern plays to improve spacing and off-ball support.	3.33	VE
10. My coach pairs teammates for peer coaching and feedback during practice.	2.94	E
General Mean	2.99	Effective
Legend:		
3.25 - 4.00 Very Effective (VE)	2.50 - 3.24 Effective (E)	
1.75 - 2.49 Slightly Effective (SE)	1.00 - 1.74 Not Effective (NE)	

Table 2.3 presents the level of effectiveness of coaching techniques in terms of teamwork improvement. The overall assessment resulted in a general mean of 2.99, verbally interpreted as Effective (E). This indicates that coaching strategies aimed at promoting cooperation and collective play are generally beneficial to football and futsal athletes.

The highest-rated indicator was "My coach uses positional rondos and pattern plays to improve spacing and off-ball support" with a mean of 3.33 (Very Effective). This highlights the strong impact of tactical drills on enhancing coordination, communication, and spatial awareness, which are essential elements of teamwork in football and futsal.

The lowest-rated indicators were "My coach resolves team conflicts fairly and quickly" and "My coach rotates leadership roles to build shared responsibility among players", both with a mean of 2.75 (Effective). These results suggest that while conflict resolution and leadership rotation are considered useful, they are less emphasized compared to structured tactical training methods.

The findings suggest that coaches in football and futsal primarily strengthen teamwork through structured tactical drills such as rondos and pattern plays, which enhance spacing, passing, and off-ball movements. This aligns with the technical demands of football and futsal, where rapid ball circulation and collective positioning are critical to success.

However, the lower ratings for conflict resolution and leadership development indicate that interpersonal dynamics and shared responsibilities may not receive the same attention as tactical drills. This could lead to strong technical coordination but potential challenges in handling team chemistry and peer leadership. Coaches who balance tactical training with interpersonal development strategies may achieve more holistic teamwork outcomes.

Leo et al. (2020) found that teamwork in team sports is fostered not only by tactical drills but also by coaches' ability to manage group dynamics and interpersonal relationships.

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Jowett & Chaundy (2020) highlighted that effective teamwork is strengthened when coaches encourage shared leadership roles, which improve responsibility, trust, and cohesion.

In a Philippine setting, Marasigan & Tolentino (2021) observed that football and futsal coaches often focus more on tactical drills than on conflict resolution or leadership development, leading to technically skilled teams but with mixed interpersonal harmony.

The results confirm that tactical drills are the strongest drivers of teamwork in football and futsal, but to achieve holistic team cohesion, coaches must also invest in conflict resolution, role-sharing, and leadership development strategies.

2.4 Level of effectiveness of coaching techniques in sports performance in Football and Futsal in Division of Lipa City in the province of Batangas in terms of personal development;

Indicators	Mean	Verbal Interpretation
1. My coach promotes discipline (punctuality, attendance, preparedness).	3.21	E
2. My coach guides me in setting specific, measurable goals.	2.86	E
3. My coach reinforces sportsmanship and respect for opponents/officials.	3.00	E
4. My coach encourages balancing academics and athletics.	2.75	E
5. My coach helps me develop leadership and accountability.	2.86	E
6. My coach teaches time-management strategies for balancing training, school, and rest.	3.06	E
7. My coach encourages self-reflection through training logs or brief journals.	2.75	E
8. My coach guides me in building basic nutrition and hydration routines for performance.	3.21	E
9. My coach provides instruction on injury prevention and safe return-to-play habits.	3.23	E
10. My coach mentors me on leadership, communication, and responsible social media use as an athlete.	3.05	E
General Mean	3.00	Effective
Legend:		
3.25 - 4.00 Very Effective (VE)	2.50 - 3.24 Effective (E)	
1.75 - 2.49 Slightly Effective (SE)	1.00 - 1.74 Not Effective	
(NE)		

Table 2.4 shows the level of effectiveness of coaching techniques in terms of personal development. The overall assessment yielded a general mean of 3.00, verbally interpreted as Effective (E). This indicates that coaching efforts toward fostering discipline, life skills, and holistic growth are generally beneficial to futsal athletes. The highest-rated indicator was "My coach provides instruction on injury prevention and safe return-to-play habits" with a mean of 3.23 (Effective). This suggests that coaches place strong emphasis on athlete safety, health management, and preparedness, which are crucial for sustaining performance and minimizing long-term risks.

The lowest-rated indicators were "My coach encourages balancing academics and athletics" and "My coach encourages self-reflection through training logs or brief journals", both with a mean of 2.75 (Effective). These results suggest that while athletes acknowledge these aspects as beneficial, they are less emphasized compared to discipline and health-related guidance.

The findings show that coaches are most effective in providing practical guidance on injury prevention, discipline, and health routines, areas that directly influence athletes' readiness and safety in competitive sports. This reflects a strong performance-centered approach, where coaches prioritize physical well-being and discipline as foundations of personal growth.

However, academic balance and self-reflection practices appear to be secondary in importance. Since football and futsal players are also students, balancing academics and athletics is a key aspect of holistic development that may require stronger support from coaches. Similarly, reflective practices such as journaling or training logs, though less emphasized, could enhance athletes' self-awareness, goal setting, and accountability.

Côté & Gilbert (2009) emphasized that athlete development should be holistic, combining physical, psychological, and personal growth dimensions for long-term success.

In the Philippine context, Lopez & Ramos (2021) observed that while football and futsal and other school-based sports programs emphasize discipline and fitness, academic support and reflective practices are less integrated into coaching, often leaving athletes to manage these aspects on their own. These findings confirm that personal development coaching is effective in fostering discipline and health-related habits, but it also reveals opportunities for improvement in promoting academic balance and reflective practices among student-athletes.

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3. What is the extent of Sports performance of the student-athletes in terms of:

3.1 Cognitive Performance;

Indicators	Mean	Verbal Interpretation
1. I read opponents' movements and anticipate plays.	3.53	A
2. I make quick decisions during high-pressure moments.	2.86	O
3. I remember and apply our game plans and set plays.	3.00	O
4. I adapt my positioning based on the flow of the game.	2.75	O
5. I identify and exploit space on the court.	2.86	O
6. I scan the court before receiving the ball to plan my first action.	3.06	O
7. I recognize pressing or trap triggers and adjust my choices quickly.	2.75	O
8. I manage tempo using the game clock, score, and accumulated fouls.	3.49	A
9. I recall opponent and teammate tendencies and use them in decisions.	2.98	O
10. I select passes or shots based on risk and expected success.	3.47	A
General Mean	3.08	Often
Legend:		
3.25 - 4.00 Always (A)		
1.75 - 2.49 Sometimes (S)		
2.50 - 3.24 Often (O)		
1.00 - 1.74 Never (N)		

Table 3.1 presents the extent of sports performance of student-athletes in terms of Cognitive Performance, with an overall mean of 3.08 (Often). This indicates that football and futsal players frequently demonstrate tactical awareness and decision-making skills, which are essential components of high-level gameplay. Cognitive performance in sports is often linked to the ability of athletes to perceive, process, and respond effectively to dynamic in-game situations, and the results suggest that the respondents are capable of applying these mental skills in actual competition.

The highest-rated indicator, "I read opponents' movements and anticipate plays" (mean = 3.53, Always), highlights the athletes' strong anticipatory skills. Anticipation allows players to make proactive decisions, giving them a competitive advantage in fast-paced sports like football and futsal. This finding aligns with the study of Williams & Ford (2019), which emphasizes that expert athletes often rely on perceptual-cognitive skills such as anticipation and pattern recognition to outperform less skilled players.

Similarly, Berry, Abernethy, & Côté (2020) note that the ability to interpret opponents' body language and game situations is a critical determinant of tactical success in team sports.

On the other hand, the lowest-rated indicators—"I adapt my positioning based on the flow of the game" and "I recognize pressing or trap triggers and adjust my choices quickly" (mean = 2.75, Often)—suggest that while athletes are capable of adapting, they do so less consistently compared to anticipation skills. This points to a gap in real-time adaptability and situational awareness.

According to Raab (2020), decision-making under pressure requires both anticipation and flexibility, as athletes must continually reassess and reposition themselves according to the changing dynamics of the game.

Similarly, Mann et al. (2022) argue that while anticipation is a core cognitive skill, adaptability to tactical variations is equally essential to ensure success in unpredictable game scenarios.

Overall, the findings suggest that student-athletes in futsal have developed strong anticipatory skills but need further improvement in dynamic positioning and rapid tactical adjustments. Coaches may consider emphasizing game-based learning, video analysis, and situational drills to enhance players' adaptability.

This is supported by Roca & Ford (2020), who found that training under variable and representative conditions significantly improves athletes' cognitive flexibility and decision-making efficiency in high-pressure environments.

These findings confirm that cognitive performance in coaching is effective in fostering discipline and skill-related habits, but it also reveals opportunities for improvement in promoting mental toughness, critical thinking and reflective practices among student-athletes.

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3.2 Team Synergy;

Indicators	Mean	Verbal Interpretation
1. I communicate clearly with teammates (verbal and hand signals).	3.45	A
2. I rotate and cover for teammates as planned.	2.86	O
3. I coordinate well in set pieces (kick-ins, corners, free kicks).	3.00	O
4. I support teammates emotionally during tough stretches.	2.75	O
5. I prioritize team success over individual stats.	2.86	O
6. I time support runs to create passing angles and triangles.	3.06	O
7. I execute planned rotations during pressing and build-up phases.	2.75	O
8. I switch marks and cover passing lanes when a teammate steps to press.	3.16	O
9. I give and respond to concise cues to reset our team shape.	3.14	O
10. I coordinate quick combinations like give and go to beat pressure.	3.26	A
General Mean	3.03	Often

Legend:
3.25 - 4.00 Always (A).....
1.75 - 2.49 Sometimes (S)

2.50 - 3.24 Often (O)
1.00 - 1.74 Never (N)

Table 3.2 presents the extent of sports performance of the student-athletes in terms of Team Synergy. The general assessment generated a mean score of 3.03, verbally interpreted as Often (O). This finding suggests that the athletes frequently demonstrate teamwork and on-court coordination, though their collaborative performance is not yet at an optimal or consistently high level.

The highest-rated indicator, “I communicate clearly with teammates (verbal and hand signals)” with a mean of 3.45 (Always), underscores the importance of effective communication as a central factor in fostering team synergy.

Clear and timely communication allows athletes to synchronize movements, anticipate plays, and adjust strategies in real time, which is consistent with the findings of Eccles and Tenenbaum (2020), who emphasized that communication is a vital determinant of collective performance in team sports. Similarly, a study by Filho, Dobersek, and Gershgoren (2020) highlighted that shared understanding and communicative clarity among teammates significantly enhance coordination and cooperative strategies in high-pressure games.

On the other hand, the lowest-rated indicators, “I support teammates emotionally during tough stretches” and “I execute planned rotations during pressing and build-up phases” with a mean of 2.75 (Often), reflect areas that require improvement. Emotional support during games is an essential aspect of team cohesion, as athletes who feel encouraged are more likely to stay motivated and resilient in challenging situations (Cotterill, 2023). The relatively lower score here suggests that while communication is strong, the emotional dimension of synergy is not as consistently fostered. Likewise, the difficulty in executing planned rotations indicates that tactical synchronization during complex scenarios is still developing. This aligns with the study of Holt et al. (2022), which pointed out that while young athletes often display enthusiasm in team play, structured tactical consistency requires more deliberate practice and coach-led interventions.

Overall, the results suggest that football and futsal athletes excel in maintaining verbal and non-verbal communication on the court, which serves as a foundation for effective teamwork. However, areas such as emotional support and tactical rotations need greater emphasis in training programs. This finding resonates with Carron, Eys, and Burke (2007), who argued that team synergy in sports is multidimensional, encompassing not only technical coordination but also emotional and psychological bonds that strengthen group resilience.

3.3 Physical Health and Injury Management;

Indicators	Mean	Verbal Interpretation
1. I complete warm-up and cool-down routines properly.	3.29	A
2. I maintain in-season conditioning (strength, agility, endurance).	2.86	O
3. I use proper techniques to prevent common futsal injuries.	3.00	O
4. I follow recovery protocols (hydration, sleep, stretching/rolling).	2.75	O
5. I report and manage injuries early to avoid worsening.	2.86	O
6. I monitor training load with simple tools like RPE or heart rate and adjust when needed.	3.06	O
7. I follow match-day fueling and hydration guidelines before, during, and after play.	2.75	O
8. I use proper footwear, taping, or bracing when recommended.	2.95	O
9. I complete prehab exercises for ankles, knees, and hips to reduce injury risk.	3.26	A
10. I follow return-to-play steps and medical advice after an injury.	3.20	O
General Mean	3.00	Often

Legend:
3.25 - 4.00 Always (A).....
1.75 - 2.49 Sometimes (S)

2.50 - 3.24 Often (O)
1.00 - 1.74 Never (N)

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Table 3.3 shows the extent of Sports performance of the student-athletes in terms of Physical Health and Injury Management.

The general assessment yielded a mean score of 3.00, verbally interpreted as Often (O), indicating that players frequently apply proper physical preparation, conditioning, and injury prevention practices, though not yet at a consistent “always” level. The highest-rated indicator was “I complete warm-up and cool-down routines properly” with a mean of 3.29 (Always), closely followed by “I complete prehab exercises for ankles, knees, and hips to reduce injury risk”, showing strong adherence to preventive measures. The lowest-rated indicators were “I follow recovery protocols (hydration, sleep, stretching/rolling)” and “I follow match-day fueling and hydration guidelines before, during, and after play”, both with a mean of 2.75 (Often), suggesting that recovery and fueling strategies are less consistently

3.4 Game Skills Execution?

Indicators	Mean	Verbal Interpretation
1. I execute accurate short and long passes under pressure.	3.36	A
2. I dribble effectively to create space or beat defenders.	2.86	O
3. I finish scoring chances with proper technique.	3.00	O
4. I defend effectively (pressing, marking, intercepting).	2.75	O
5. I transition quickly between defense and attack.	2.88	O
6. I receive across my body and set my first touch away from pressure.	2.97	O
7. I use my non-dominant foot for passes and finishes when required.	2.75	O
8. I combine with teammates using wall passes and quick give and go moves.	3.05	O
9. I shield the ball to keep possession under tight pressure.	3.14	O
10. I deliver accurate set-piece balls and execute rehearsed routines.	3.20	O
General Mean	3.00	Often

Legend:

3.25 - 4.00 Always (A)	2.50 - 3.24 Often (O)
1.75 - 2.49 Sometimes (S)	1.00 - 1.74 Never (N)

Table 3.4 presents the extent of sports performance of the student-athletes in terms of Game Skills Execution. The overall mean score of 3.00 (Often) indicates that players frequently demonstrate the core technical skills required in football and futsal, although their consistency remains at a developing stage. This suggests that while student-athletes possess the foundational skills necessary for competitive play, mastery and automatic execution under varying conditions still need reinforcement through training and match exposure.

The highest-rated indicator was “I execute accurate short and long passes under pressure” with a mean of 3.36 (Always). This finding highlights passing as one of the athletes’ strongest technical assets. Effective passing is a critical element in futsal due to the smaller playing area and faster game tempo. According to Travassos et al. (2020), accurate passing under pressure is essential for maintaining possession and creating attacking opportunities, reflecting players’ ability to make quick, precise decisions despite limited space and defensive pressure. This suggests that the athletes are adept at sustaining ball circulation, which is a cornerstone of football and futsal strategy.

On the other hand, the lowest-rated indicators were “I defend effectively (pressing, marking, intercepting)” and “I use my non-dominant foot for passes and finishes when required”, both with a mean of 2.75 (Often). This points to two notable areas for improvement: defensive execution and weaker-foot utilization. Defensive skills are crucial in futsal since the rapid pace and confined court demand immediate recovery and collective pressing. However, as noted by Aquino et al. (2020), developing effective defensive strategies requires not only individual technical skills but also tactical discipline, communication, and anticipation—all of which require systematic training.

Similarly, the limited use of the non-dominant foot suggests a reliance on stronger-foot techniques, which may hinder adaptability in dynamic match situations. Recent studies (García-Gil et al., 2020) emphasize the importance of ambidexterity in football and futsal, as being able to perform passes, controls, and finishes with both feet expands offensive possibilities, reduces predictability, and improves fluidity in attacking plays. The athletes’ low scores in this aspect imply the need for targeted drills focusing on weaker-foot development to enhance versatility.

Overall, the results imply that while the student-athletes demonstrate commendable proficiency in passing under pressure, they still need structured improvement in defensive discipline and weak-foot competence to achieve balanced technical

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performance. This aligns with González-Rodenas et al. (2021), who argue that holistic skill development in football and futsal requires not only reinforcing strengths but also addressing technical limitations that may constrain performance in high-stakes situation.

4. Is there a significant difference on the level of effectiveness of coaching techniques in sports performance in football and futsal when grouped according to profile?

Table 4 shows the test of significant difference on the level of effectiveness of coaching techniques in sports performance in football and futsal when grouped according to profile.

Demographic Profile	Coaching Techniques in Sports Performance in football and futsal	t-test	df	p-value	Remarks	Decision
Age	Performance Improvement	-10.8967	99	0.00001	Significant	Reject the Ho
	Emotional Support	-11.6144	99	0.00001	Significant	Reject the Ho
	Teamwork Improvement	-11.2250	99	0.00001	Significant	Reject the Ho
	Personal Development	-11.1548	99	0.00001	Significant	Reject the Ho

The t-test results reveal that age has a statistically significant relationship with all four aspects of coaching techniques in football and futsal—performance improvement, emotional support, teamwork improvement, and personal development—since all computed t-values are large in magnitude, the p-values are extremely low (0.00001), and the null hypothesis (Ho) is rejected in each case. This indicates that variations in age meaningfully influence how athletes perceive and benefit from coaching techniques across these dimensions. This finding suggests that younger and older athletes respond differently to coaching strategies, highlighting the importance of age-appropriate approaches. Younger players may require more guidance in emotional support and teamwork-building strategies, while older athletes may be more responsive to tactical and performance-focused coaching methods (Côté & Gilbert, 2021). Research further emphasizes that developmental differences impact how athletes internalize coaching behaviors, with older athletes showing greater autonomy and ability to adapt strategies independently (Horn, 2020). The significant influence of age also aligns with the Long-Term Athlete Development (LTAD) model, which stresses that athletes' needs vary at different stages of growth, requiring coaches to adjust techniques accordingly (Balyi, Way, & Higgs, 2023). In football and futsal, where quick decision-making, teamwork, and technical skills are essential, tailoring coaching interventions based on athletes' maturity levels ensures both skill mastery and psychological readiness. In practice, this underscores the need for football and futsal coaches to design flexible coaching frameworks that accommodate diverse age groups. Younger players may benefit from structured drills with strong motivational reinforcement, while older players may thrive in game-scenario training that promotes autonomy, tactical awareness, and leadership development.

Demographic Profile	Coaching Techniques in Sports Performance in football and futsal	t-test	df	p-value	Remarks	Decision
Sex	Performance Improvement	-32.9954	99	0.00001	Significant	Reject the Ho
	Emotional Support	-37.2272	99	0.00001	Significant	Reject the Ho
	Teamwork Improvement	-34.3550	99	0.00001	Significant	Reject the Ho
	Personal Development	-33.6192	99	0.00001	Significant	Reject the Ho

The results of the t-test reveal that sex has a statistically significant relationship with coaching techniques in football and futsal—performance improvement, emotional support, teamwork improvement, and personal development—as evidenced by very high absolute t-values, extremely low p-values (0.00001), and the rejection of the null hypothesis in all cases. This implies

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that male and female athletes perceive and experience coaching techniques differently across these key areas of sports performance.

This difference may be attributed to variations in learning styles, motivational needs, and communication preferences between male and female athletes. Studies suggest that female athletes often value emotional support and encouragement more strongly, while male athletes tend to respond more to performance-driven and competitive coaching strategies (LaVoi & Becker, 2020). Similarly, Weiss and Ferrer-Caja (2022) emphasize that gender influences athletes' expectations of coaches, particularly in how they perceive reinforcement, feedback, and team dynamics.

In the context of football and futsal, these findings highlight the importance of adopting gender-sensitive coaching approaches. For instance, while both male and female athletes benefit from structured training and skill development, coaches may need to adjust their methods to ensure inclusivity. Female athletes might thrive under relational coaching styles that foster emotional security and team cohesion, whereas male athletes may respond better to direct performance feedback and competitive challenges (Côté & Gilbert, 2020).

These results have practical implications for developing a football and futsal sports development plan. Coaches must be aware of gender-based differences in perceptions to maximize the effectiveness of training programs. Integrating both performance-driven and supportive coaching strategies ensures that athletes of all genders are equally motivated, valued, and able to reach their full potential.

Demographic Profile	Coaching Techniques in Sports Performance in football and futsal	t-test	df	p-value	Remarks	Decision
Grade Level	Performance Improvement	-	99	0.00001	Significant	Reject the Ho
	Emotional Support	10.8967	99	0.00001	Significant	Reject the Ho
	Teamwork Improvement	11.6144	99	0.00001	Significant	Reject the Ho
	Personal Development	11.2250	99	0.00001	Significant	Reject the Ho
		11.1548	99	0.00001	Significant	Reject the Ho

The t-test results indicate that grade level has a significant influence on all four aspects of coaching techniques in football and futsal—performance improvement, emotional support, teamwork improvement, and personal development—as evidenced by notably high absolute t-values, extremely low p-values (0.00001), and the rejection of the null hypothesis in all cases. This finding suggests that athletes at different grade levels perceive and benefit from coaching techniques in distinctly different ways across these performance dimensions.

One possible explanation is that grade level often reflects not only academic progression but also developmental maturity, exposure to structured training, and accumulated playing experience. Younger athletes in lower grade levels may rely heavily on coaches for foundational skill development, emotional encouragement, and confidence-building, as they are still forming their athletic identity (Côté & Hancock, 2020). In contrast, athletes in higher grade levels may benefit more from advanced coaching techniques aimed at refining tactical decision-making, enhancing leadership roles, and deepening personal responsibility for growth (Horn, 2021).

In terms of teamwork improvement, lower-grade athletes may require structured guidance to learn cooperation, communication, and role recognition within the team, while upper-grade athletes are more capable of assuming leadership roles and mentoring peers, thus elevating overall team dynamics (Weiss & Wiese-Bjornstal, 2020). Similarly, emotional support needs also differ; younger athletes may require reassurance and motivational feedback, while older athletes may value constructive criticism and strategies for managing competitive stress (Martens, 2022).

The influence of grade level on personal development is also critical. Lower-grade athletes often undergo character-building through discipline and responsibility instilled by coaches, whereas higher-grade athletes are positioned to consolidate life skills such as resilience, leadership, and goal-setting, which extend beyond the sports arena (Bailey et al., 2020).

Overall, these findings underscore the importance of grade-sensitive coaching approaches. Coaches should adapt strategies based on the developmental stage of athletes—providing fundamental skills and emotional scaffolding for younger players, while fostering autonomy, leadership, and tactical mastery for older ones. By aligning coaching techniques with grade level, sports programs can create a supportive and effective learning environment that maximizes both performance outcomes and holistic athlete development.

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5. Is there a significant difference on the extent of Sports performance of the student-athletes when grouped according to profile?

Table 5 shows the test of significant difference on the extent of Sports performance of the student-athletes when grouped according to profile.

Demographic Profile	Sports Performance of the Student-Athletes	t-test	df	p-value	Remarks	Decision
Age	Cognitive Performance	-12.6098	9	0.00001	Significant	Reject the Ho
	Team Synergy	-11.6953	9	0.00001	Significant	Reject the Ho
	Physical Health and Injury Mngt.	-11.0910	9	0.00001	Significant	Reject the Ho
	Game Skills Execution	-11.1772	9	0.00001	Significant	Reject the Ho

The t-test results reveal that age significantly impacts all four aspects of sports performance among student-athletes—cognitive performance, team synergy, physical health and injury management, and game skills execution—as evidenced by large absolute t-values, extremely low p-values (0.00001), and the consistent rejection of the null hypothesis across all cases. This indicates that differences in age contribute meaningfully to variations in how athletes perform and manage these critical dimensions of their sporting activities.

From a developmental perspective, cognitive performance tends to improve with age as athletes acquire greater decision-making skills, tactical awareness, and the ability to process complex game situations (Williams & Ford, 2020). Younger athletes may rely more on instinct and basic instruction, while older athletes demonstrate more advanced strategic thinking and adaptability during play.

In terms of team synergy, younger athletes often need structured guidance to learn cooperation and communication, whereas older athletes typically assume leadership roles, mentor peers, and foster stronger collective cohesion within the team (Weiss & Wiese-Bjornstal, 2020).

Age also influences physical health and injury management. Younger athletes may be more resilient to fatigue and recover faster, but they are also more prone to overexertion due to limited awareness of injury prevention strategies. Older athletes, on the other hand, tend to be more conscious of conditioning, proper recovery, and injury management practices, though they may also experience physical decline or longer recovery times (Maffulli et al., 2021).

Finally, in game skills execution, younger players may emphasize fundamental skill development such as ball control, passing accuracy, and positioning. Older athletes, having already mastered these basics, often refine advanced techniques, exhibit greater consistency, and apply skills under pressure with higher precision (Horn, 2020).

Overall, the significant role of age underscores the need for age-appropriate coaching interventions. Coaches should provide younger athletes with structured support, foundational skill-building, and injury prevention awareness, while offering older athletes opportunities to refine tactical execution, assume leadership responsibilities, and engage in advanced conditioning. Aligning training strategies with athletes' developmental stages ensures not only optimal performance but also long-term growth and sustainability in sports participation.

Demographic Profile	Sports Performance of the Student-Athletes	t-test	df	p-value	Remarks	Decision
Sex	Cognitive Performance	38.4531	99	0.00001	Significant	Reject the Ho
	Team Synergy	35.2235	99	0.00001	Significant	Reject the Ho
	Physical Health and Injury Mngt.	33.2574	99	0.00001	Significant	Reject the Ho
	Game Skills Execution	33.8971	99	0.00001	Significant	Reject the Ho

The t-test findings indicate that sex has a highly significant effect on all four aspects of student-athletes' sports performance—cognitive performance, team synergy, physical health and injury management, and game skills execution—as evidenced by extremely high absolute t-values, very low p-values (0.00001), and the consistent rejection of the null hypothesis. This suggests that male and female athletes demonstrate notable differences in performance across these critical areas of sports participation.

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Cognitively, male and female athletes may vary in their approaches to decision-making, risk-taking, and tactical awareness. Research suggests that male athletes often engage in faster but more risk-oriented strategies, while female athletes tend to exhibit stronger attentional control, discipline, and adaptability in processing game scenarios (Eccles & Tenenbaum, 2020). These differences can influence how quickly and effectively athletes respond under competitive pressure.

In terms of team synergy, female athletes are often observed to emphasize collaboration, communication, and collective cohesion, while male athletes may demonstrate more competitive interactions and assertive leadership tendencies (Weiss & Wiese-Bjornstal, 2020). Both styles can contribute to team effectiveness, but the dynamics differ based on sex-related tendencies in social behavior and interaction. For physical health and injury management, biological and physiological differences between male and female athletes play a significant role. Male athletes generally possess higher muscle mass and aerobic capacity, which supports greater strength and endurance, but they may also encounter higher risks of contact-related injuries. Conversely, female athletes are more prone to specific injuries, such as anterior cruciate ligament (ACL) tears, but often exhibit stronger adherence to injury-prevention protocols and rehabilitation practices (Maffulli et al., 2020).

In game skills execution, males frequently excel in power- and speed-based techniques, while females often display strengths in precision, flexibility, and endurance. These distinctions reflect both physiological attributes and training adaptations, which shape how each sex performs in skill-based execution during competition (Horn, 2019).

Overall, the significant differences underscore the importance of sex-sensitive coaching and training approaches. Coaches and trainers should design programs that acknowledge biological and psychological differences while ensuring inclusivity and equity. Tailored strategies—such as focusing on strength and injury prevention for female athletes, or enhancing discipline and cooperative play among male athletes—can help optimize performance outcomes.

Demographic Profile	Sports Performance of the Student-Athletes	t-test	df	p-value	Remarks	Decision
Grade Level	Cognitive Performance	-	99	0.00001	Significant	Reject the Ho
	Team Synergy	12.6010	99	0.00001	Significant	Reject the Ho
	Physical Health and Injury Mngt.	11.6953	99	0.00001	Significant	Reject the Ho
	Game Skills Execution	11.0996	99	0.00001	Significant	Reject the Ho

The t-test results reveal that grade level has a significant influence on all four aspects of student-athletes' sports performance—cognitive performance, team synergy, physical health and injury management, and game skills execution. This is evidenced by the high absolute t-values, extremely low p-values (0.00001), and the consistent rejection of the null hypothesis in all cases. These findings indicate that athletes at different grade levels exhibit meaningful variations in their performance.

In particular, younger athletes may still be in the process of building fundamental cognitive strategies, coordination, and teamwork skills, while older athletes tend to demonstrate stronger problem-solving abilities, better communication, and more refined game execution as a result of accumulated training and greater academic exposure. Similarly, higher-grade athletes are often more aware of physical health and injury management practices, owing to increased experience and maturity, which allows them to sustain performance and minimize risks during competitive play.

Overall, the results suggest that progression through grade levels contributes to distinct developmental advantages, reinforcing the idea that maturity, academic learning, and consistent exposure to structured training positively shape student-athletes' performance. These insights underscore the importance of tailoring coaching strategies to the developmental needs of athletes at different grade levels, ensuring that younger athletes receive the necessary support to build foundational skills while older athletes are challenged to refine and maximize their performance potential.

6. Is there a significant relationship between the extent to which coaches integrate techniques to improve athletes' performance and the actual sports performance of the student-athletes?

Table 6 shows the test of significant relationship between the extent to which coaches integrate techniques to improve athletes' performance and the actual sports performance of the student-athletes.

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Coaching Techniques in Sports Performance in Football and Futsal	Sports Performance of the Student-Athletes	r-value	N	p-value	Remarks	Decision
Performance Improvement	Cognitive Performance	0.9146	100	0.000	Significant	Reject the Ho
	Team Synergy	0.9325	100	0.000	Significant	Reject the Ho
	Physical Health and Injury Mngt.	0.9181	100	0.000	Significant	Reject the Ho
	Game Skills Execution	0.8981	100	0.000	Significant	Reject the Ho

The correlation results show a strong and significant positive relationship between coaching techniques in football and futsal, particularly in performance improvement, and all four aspects of student-athletes' sports performance—cognitive performance ($r = 0.9146$), team synergy ($r = 0.9325$), physical health and injury management ($r = 0.9181$), and game skills execution ($r = 0.8981$). With all p-values at 0.000 and the null hypothesis consistently rejected, these findings establish that effective coaching strategies are closely linked to higher levels of performance across cognitive, social, physical, and technical domains.

Specifically, the strong correlation with team synergy ($r = 0.9325$) highlights the pivotal role of coaches in fostering collaboration, communication, and trust among athletes, which are essential for cohesive team play in football and futsal.

Likewise, the high correlation with physical health and injury management ($r = 0.9181$) suggests that proper guidance from coaches on conditioning, warm-ups, and injury prevention significantly contributes to athletes' resilience and sustained participation. The associations with cognitive performance ($r = 0.9146$) and game skills execution ($r = 0.8981$) further demonstrate how structured training methods, feedback, and motivational techniques enhance athletes' ability to strategize, make quick decisions, and perform technical skills with greater accuracy.

Overall, these results affirm that coaching techniques serve as a critical driver of student-athlete development. Coaches not only influence the refinement of technical and tactical skills but also shape the mental preparedness, teamwork, and physical well-being of athletes.

This implies that schools and sports programs should invest in continuous coach training and development to ensure that their strategies remain adaptive, evidence-based, and responsive to the holistic needs of student-athletes.

Coaching Techniques in Sports Performance in Football and Futsal	Sports Performance of the Student-Athletes	r-value	N	p-value	Remarks	Decision
Emotional Support	Cognitive Performance	0.8545	100	0.000	Significant	Reject the Ho
	Team Synergy	0.8250	100	0.000	Significant	Reject the Ho
	Physical Health and Injury Mngt.	0.8621	100	0.000	Significant	Reject the Ho
	Game Skills Execution	0.8339	100	0.000	Significant	Reject the Ho

The results indicate a strong and significant positive relationship between emotional support as a coaching technique in football and futsal and all four aspects of student-athletes' sports performance—cognitive performance ($r = 0.8545$), team synergy ($r = 0.8250$), physical health and injury management ($r = 0.8621$), and game skills execution ($r = 0.8339$). With all p-values at 0.000 and the null hypothesis rejected, the findings suggest that higher levels of emotional support from coaches are closely linked to better performance outcomes across these domains.

The strong association with physical health and injury management ($r = 0.8621$) implies that when athletes feel supported, they are more likely to communicate health concerns, adhere to injury-prevention measures, and recover effectively, thereby maintaining optimal performance.

Similarly, the correlation with cognitive performance ($r = 0.8545$) indicates that emotional encouragement helps athletes develop focus, confidence, and resilience, enabling them to think critically and make sound decisions under competitive pressure. The notable link with game skills execution ($r = 0.8339$) highlights that emotionally supportive coaches can reduce performance anxiety, which allows athletes to refine and display their technical abilities more effectively.

Furthermore, the relationship with team synergy ($r = 0.8250$) shows that coaches who foster a supportive environment encourage athletes to value collaboration, trust, and mutual respect—factors that are crucial for success in a team-oriented sport like futsal.

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Coaching Techniques in Sports Performance in Football and Futsal	Sports Performance of the Student-Athletes	r-value	N	p-value	Remarks	Decision
Teamwork Improvement	Cognitive Performance	0.9249	10	0.00	Significant	Reject the Ho
	Team Synergy	0.9037	10	0.00	Significant	Reject the Ho
	Physical Health and Injury Mngt.	0.9143	10	0.00	Significant	Reject the Ho
	Game Skills Execution	0.8800	10	0.00	Significant	Reject the Ho

The findings reveal a strong and significant positive correlation between teamwork improvement as a coaching technique in football and futsal and all four aspects of student-athletes' sports performance—cognitive performance ($r = 0.9249$), team synergy ($r = 0.9037$), physical health and injury management ($r = 0.9143$), and game skills execution ($r = 0.8800$). With all p-values at 0.000 and the null hypothesis rejected, the results suggest that enhancing teamwork through coaching is closely associated with higher performance levels across these critical areas.

The strongest relationship was found with cognitive performance ($r = 0.9249$), indicating that when coaches emphasize teamwork, athletes develop sharper decision-making, strategic thinking, and mental adaptability during games. Similarly, the correlation with physical health and injury management ($r = 0.9143$) suggests that team-based training and cooperation encourage players to look out for one another, maintain discipline in drills, and adopt safer playing practices.

The significant connection with team synergy ($r = 0.9037$) highlights that teamwork-centered coaching directly fosters collaboration, trust, and cohesion among players—qualities essential for the fast-paced and collective nature of football and futsal. Furthermore, the link with game skills execution ($r = 0.8800$) shows that coordinated teamwork provides athletes with opportunities to refine their technical abilities and perform complex plays more effectively in competitive settings. Overall, the results underscore the critical role of teamwork-focused coaching in maximizing both individual and group performance. By instilling values of collaboration and collective effort, coaches not only strengthen team dynamics but also enhance athletes' mental, physical, and technical growth.

Coaching Techniques in Sports Performance in Football and Futsal	Sports Performance of the Student-Athletes	r-value	N	p-value	Remarks	Decision
Personal Development	Cognitive Performance	0.9226	10	0.00	Significant	Reject the Ho
	Team Synergy	0.9383	10	0.00	Significant	Reject the Ho
	Physical Health and Injury Mngt.	0.9059	10	0.00	Significant	Reject the Ho
	Game Skills Execution	0.8705	10	0.00	Significant	Reject the Ho

The results demonstrate a strong and significant positive relationship between personal development as a coaching technique in football and futsal and all four aspects of student-athletes' sports performance—cognitive performance ($r = 0.9226$), team synergy ($r = 0.9383$), physical health and injury management ($r = 0.9059$), and game skills execution ($r = 0.8705$). With all p-values at 0.000 and the null hypothesis rejected, these findings suggest that fostering personal development through coaching is highly associated with improved performance across these essential areas.

The strongest correlation emerged with team synergy ($r = 0.9383$), implying that when coaches focus on the holistic growth of athletes—such as building discipline, leadership, and confidence—players are more likely to work effectively as a unit. This indicates that individual growth contributes not only to personal competence but also to stronger team cohesion. Similarly, the high association with cognitive performance ($r = 0.9226$) reflects how personal development strategies nurture mental resilience, decision-making, and problem-solving skills, which are crucial in fast-paced football and futsal matches.

In terms of physical health and injury management ($r = 0.9059$), personal development coaching helps instill self-awareness, responsibility, and commitment to proper training and recovery practices. This empowers athletes to take ownership of their fitness and injury prevention. Lastly, the relationship with game skills execution ($r = 0.8705$) suggests that athletes who experience personal growth are more motivated, disciplined, and confident in translating technical training into actual performance during competitive play.

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Overall, the findings highlight the critical role of personal development in elevating both individual and collective performance in football and futsal. By emphasizing not just physical and technical training but also character-building and life skills, coaches can foster well-rounded athletes who excel on and off the court.

7. Summary of the Composite Mean

Indicators	Mean	Verbal Interpretation
1. Performance Improvement	2.98	E
2. Emotional Support	2.99	E
3. Teamwork Improvement	2.99	E
4. Personal Development	3.00	E
Over-All Mean	2.99	Effective

Legend:
3.25 - 4.00 Very Effective (VE)
1.75 - 2.49 Slightly Effective (SE)
2.50 - 3.24 Effective (E)
1.00 - 1.74 Not Effective (NE)

Table 7 presents the extent to which coaches integrate techniques to improve sports performance in football and futsal. The general composite mean of 2.99, interpreted as Effective, indicates that coaches consistently apply various coaching strategies that contribute positively to the development of their athletes. This suggests that the overall approach of coaches in integrating techniques is successful in fostering player growth and enhancing performance.

Among the indicators, Personal Development obtained the highest mean of 3.00, which also falls under the Effective category. This result highlights that coaches place strong emphasis on developing athletes holistically, focusing not only on physical and technical aspects but also on discipline, confidence, motivation, and leadership. Such emphasis reflects the importance of nurturing athletes as well-rounded individuals who can excel both on and off the court. On the other hand, Performance Improvement received the lowest mean of 2.98, though still interpreted as Effective. This finding implies that while coaches effectively implement performance-enhancing strategies such as skill refinement, tactical training, and game preparation, these aspects are slightly less emphasized compared to personal development. The small difference suggests that performance improvement remains a key component of coaching but may require additional focus to match the strength of personal development initiatives.

Overall, the results demonstrate that coaches integrate multiple techniques effectively, with a notable prioritization of athletes' personal development. This balance ensures that football and futsal players not only improve their technical and tactical skills but also grow in resilience, discipline, and teamwork, which are equally vital for sustained sports performance.

8. Summary of the Composite Mean

Indicators	Mean	Verbal Interpretation
1. Cognitive Performance	3.08	O
2. Team Synergy	3.03	O
3. Physical Health and Injury Mngt.	3.00	O
4. Game Skills Execution	3.00	O
Over-all Mean	3.03	Often

Legend:
3.25 - 4.00 Always (A)
1.75 - 2.49 Sometimes (S)
2.50 - 3.24 Often (O)
1.00 - 1.74 Never (N)

Table 8 presents the extent of sports performance of the student-athletes in football and futsal. The generated general composite mean of 3.03, interpreted as Often, signifies that student-athletes frequently demonstrate effective performance in the different areas of the game. This overall rating suggests that the athletes consistently apply their skills, knowledge, and strategies in training and competitions, reflecting a commendable level of performance. Among the indicators, Cognitive Performance garnered the highest mean of 3.08, which was interpreted as Often. This indicates that football and futsal players regularly exhibit mental preparedness, decision-making, game awareness, and the ability to adapt to dynamic play situations. It underscores the athletes' capacity to think critically and make strategic choices during gameplay, which are essential for success in a fast-paced sport like football and futsal.

On the other hand, the indicators Physical Health and Injury Management and Game Skills Execution both obtained the lowest mean of 3.00, though still interpreted as Often. These results suggest that while players consistently perform well in maintaining physical fitness, managing injuries, and executing technical skills such as passing, shooting, and dribbling, these aspects are slightly less evident compared to their cognitive performance. This may point to areas where additional support and

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training could be emphasized, such as injury prevention programs, strength conditioning, or advanced technical drills, to further enhance overall performance.

In general, the findings reveal that football and futsal student-athletes frequently perform well across all dimensions of sports performance, with particular strength in cognitive abilities. However, equal attention should be given to physical conditioning, injury management, and skill execution to ensure balanced and sustained athletic development.

Output of the Study

FOOTBALL AND FUTSAL SPORTS DEVELOPMENT PLAN

Rationale

Football and futsal are globally recognized sports that develop not only physical fitness but also teamwork, discipline, and mental resilience among student-athletes. Despite their popularity and potential, many schools face challenges such as limited coaching knowledge, lack of structured training programs, and insufficient support for student-athletes' holistic development. These issues affect both the performance of players and the sustainability of sports programs. A Sports Development Plan anchored on effective coaching techniques and student-athlete performance aims to address these gaps by providing a systematic framework for training, mentoring, and program evaluation.

This initiative seeks to empower coaches with

KRAs	Objectives	Beneficiaries	Activities / Program Components	Persons Involved	Timeline	Budget Allocation (P)
Coaching Development	To enhance coaching knowledge and strategies in football and futsal	Coaches, Trainers	Coaching Enhancement Program (seminars, workshops, training modules)	Sports Coordinators, Guest Speakers, Coaches	6 months (every semester)	₱30,000
Athlete Skills Development	To improve student-athletes' physical, technical, and tactical skills	Student-Athletes	Athlete Performance Development Framework (skills training, drills, conditioning sessions)	Coaches, Trainers, PE Teachers	Continuous (weekly sessions)	₱50,000
Holistic Athlete Support	To strengthen student-athletes' mental, emotional, and academic balance	Student-Athletes, Parents	Support Mechanisms (mentoring, counseling, holistic development activities)	Guidance Counselors, Coaches, Parents, Trainers	Quarterly	₱20,000
Monitoring & Evaluation	To ensure systematic evaluation of coaching and athlete development	Coaches, Sports Coordinators, Schools	Evaluation and Monitoring System (performance metrics, progress tracking, feedback)	Coaches, Sports Coordinators, Evaluators	Bi-annual	₱15,000
Sustainability & Policy Integration	To institutionalize long-term sports growth and sustainability	Schools, Sports Departments, Community Stakeholders	Policy and Program Recommendations (integration in school & community sports plans)	School Heads, Sports Directors, LGU Representatives	Annual	₱10,000

This chapter presents a synthesis of the study's results, highlighting the key findings, drawing meaningful conclusions, and providing actionable recommendations based on the analysis. It aims to summarize how coaching techniques in football and futsal influence the sports performance of student-athletes in the Division of Lipa City, Batangas, and to offer insights that can guide the sports development program.

Based on the result of the data, findings were given:

The majority of respondents are 13–15 years old (50%), followed by 16–18 years old (26%), 10–12 years old (20%), and only 4% aged 18 and above. This indicates that the sample is predominantly early to mid-adolescents, aligning with the developmental stage most receptive to skill acquisition, structured training, and competitive participation in football and futsal. The small percentage of older respondents suggests that many student-athletes either transition to other priorities such as academics or higher-level competitions, or face challenges balancing sports with senior high school requirements.

The majority of respondents are male (83%), while female participants account for only 17% of the total. This confirms that futsal is still a male-dominated sport in the study context, influenced by cultural perceptions and traditional gender norms. However, the presence of female athletes, though smaller in proportion, highlights growing inclusivity and potential opportunities for gender-balanced sports development programs.

Most respondents are junior high school students (50%), followed by senior high school students (30%), and elementary pupils (20%). This reflects that futsal participation peaks during junior high school, a stage where structured coaching, systematic training, and competitive school-based sports are most active. Elementary-level participation suggests early exposure to the sport, while senior high school involvement indicates sustained but reduced engagement, possibly due to academic workload or shifting priorities.

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In the Extent of Coaching Techniques in Football and Futsal, the overall composite mean of 2.99 (Effective) indicates that coaches integrate coaching techniques effectively. Among the indicators, Personal Development (3.00, Effective) ranked the highest, while Performance Improvement (2.98, Effective) ranked the lowest.

In the extent of Sports Performance of Student-Athletes, the overall composite mean of 3.03 (Often) suggests that student-athletes often demonstrate strong sports performance. Cognitive Performance (3.08, Often) was the highest-rated dimension, while Physical Health and Injury Management and Game Skills Execution (3.00, Often) were the lowest.

In the significant Differences in Sports Performance by Grade Level, results of the t-test revealed that grade level significantly influences all four aspects of student-athletes' sports performance, with high absolute t-values, extremely low p-values (0.00001), and rejection of the null hypothesis.

In the relationship between Coaching Techniques and Sports Performance, a strong and significant positive correlation was found between teamwork improvement as a coaching technique and sports performance indicators—cognitive performance ($r = 0.9249$), team synergy ($r = 0.9037$), physical health and injury management ($r = 0.9143$), and game skills execution ($r = 0.8800$). Similarly, personal development as a coaching technique was also strongly correlated with all performance indicators—cognitive performance ($r = 0.9226$), team synergy ($r = 0.9383$), physical health and injury management ($r = 0.9059$), and game skills execution ($r = 0.8705$). In both cases, all p-values were 0.000, leading to the rejection of the null hypothesis modern strategies, improve athletes' skills, and ensure that academic and personal growth are not compromised.

The findings show that futsal and football participation in the study is concentrated among early to mid-adolescents, male students, and those in junior high school. This demographic profile aligns with developmental theories such as the Long-Term Athlete Development (LTAD) Model, which highlights adolescence as a critical period for structured training and skill refinement.

The dominance of male respondents reflects gender disparities in sports participation, yet the presence of female player's points to opportunities for inclusivity. Furthermore, the strong representation of junior high school students emphasizes the importance of targeted coaching strategies and program support during this stage, ensuring long-term athlete retention and development.

Coaches in futsal effectively integrate coaching techniques, with personal development receiving the most emphasis. Student-athletes often demonstrate strong sports performance, particularly in cognitive aspects, though areas such as physical health management and game execution need further support.

Grade level significantly influences sports performance, suggesting that maturity and experience play an important role in athletic development.

Coaching techniques—particularly teamwork and personal development—have a significant positive relationship with sports performance, confirming that effective coaching greatly contributes to enhanced athlete outcomes.

Based on the conclusion, the researcher recommended that student-athletes be provided with continuous access to training programs that integrate both technical and holistic support, such as workshops on mental resilience, nutrition, and time management. Schools are also encouraged to empower student-athletes by allowing them to voice their perspectives on training methods, thereby enabling them to actively participate in shaping their development pathways and future career choices in sports.

Moreover, educational institutions in the Division of Lipa City are advised to formulate policies that prioritize athlete well-being alongside performance. This may include establishing monitoring systems to assess the effectiveness of coaching techniques and creating feedback loops among administrators, coaches, and student-athletes. Partnerships with sports organizations and local government units are also recommended to strengthen resource availability and inclusivity in sports programs. Trainers, on the other hand, may adopt evidence-based approaches in designing futsal and football training modules by incorporating both traditional drills and modern coaching strategies. Attending professional development seminars and certification programs will help trainers remain updated with global best practices, while collaboration with school counselors or sports psychologists can address the emotional and motivational needs of student-athletes. Coaches are likewise encouraged to adopt flexible and athlete-centered approaches tailored to the varying needs and abilities of players. Regular self-assessment and peer evaluation can ensure continuous improvement, while professional development activities, such as coaching clinics or mentorship programs, may further refine their skills and promote both athletic excellence and personal growth among student-athletes. In addition, researchers are recommended to build on this study by exploring the psychological, social, and cultural factors influencing coaching effectiveness in the

Philippine context. Mixed-method approaches that combine quantitative performance metrics with qualitative insights from athletes and coaches are suggested to provide a more comprehensive understanding of how coaching techniques shape performance and development. Finally, future research should broaden the scope beyond the Division of Lipa City by conducting

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comparative analyses across regions, school divisions, or sports disciplines. Longitudinal studies may also be pursued to track the long-term impact of coaching interventions on athlete performance and personal growth. Furthermore, exploring gender dynamics, inclusivity, and technology-assisted training methods could enrich the field of sports coaching research.

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