

Evaluating Sports Development Training Program: As Study of Effectiveness, Efficiency and Sustainability

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Abstract — This study evaluates the effectiveness, efficiency, and sustainability of the existing sports training program in the Maria Aurora District, Aurora Province, utilizing a descriptive-survey research design. A total of 288 respondents comprising athletes, coaches, and stakeholders provided data through validated survey instruments. The findings reveal that the current program is generally effective in enhancing athlete performance during pre-, during-, and post-competition phases, especially in areas involving science-based conditioning, skills training, and structured goal setting. The program also shows efficiency in instructional design and athlete monitoring. However, results indicate moderate efficiency in resource management, particularly in budgeting, facility upkeep, and access to medical and psychological services. In terms of sustainability, while environmental awareness and social support from the community were notable, the financial aspect of the program remains fragile and lacks long-term viability.

Given these findings, the study recommends a comprehensive redesign and strengthening of the sports training program guided by the principles of efficiency, effectiveness, and sustainability. A high-priority recommendation is the institutionalization of a district-wide Sports Development Plan that includes annual resource mapping, partnership-building strategies, and performance-based budgeting to ensure that funding is sustainable and equitably distributed. Moreover, the program must integrate holistic athlete support systems—including access to regular medical checkups, mental health services, nutrition counseling, and injury rehabilitation—to promote overall athlete well-being and long-term performance. Upgrading and maintaining training facilities must be prioritized through local government initiatives and community engagement efforts to create safe, modern, and inclusive spaces for athletic development.

To sustain these improvements, the study also recommends capacity-building for coaches and staff through regular training in sports science, data analytics, and inclusive coaching methodologies. Periodic evaluation of training outcomes should be institutionalized using digital monitoring tools to guide program adjustments and ensure data-driven decisions. Lastly, policies that align grassroots sports development with national performance standards must be developed and localized to provide a clear and sustainable direction for future athletic growth. These recommendations aim to transform the existing training program into a model of excellence that not only produces competitive athletes but also fosters a culture of health, resilience, and community pride in the district.

***Keywords* — Sports Development, Training Program, Efficiency, Effectiveness, Sustainability**

I. Introduction

Sports training program considerations play a crucial role in a sports administrator's construction and adoption of specific schemes of training for sports. Physiologically, sport complexity makes individual understanding an almost inevitable duty in personalizing programs to accommodate the athlete's needs (Bompa & Buzzichelli, 2021). This specificity can be true, especially for strength training, which must be specific to the sport and athletes' abilities.

A well-structured sports training program is essential for the holistic development and sustained success of athletes. It serves as a foundation for improving multiple facets of athletic performance, beginning with physical conditioning that enhances endurance, strength, flexibility, and coordination core attributes necessary to meet the physical demands of various sports. Beyond physicality, consistent training refines athletes' fundamental techniques, enabling mastery of sport-specific skills and strategies crucial for high-level performance (Zatsiorsky & Kraemer, 2020).

Consistent training goes beyond improving physical fitness it sharpens an athlete's basic techniques and helps them master the specific skills and strategies required in their sport. This leads to more precise, efficient, and effective performance during competition. Equally vital is the cultivation of mental toughness, as psychological training builds resilience, focus, and motivation, empowering athletes to remain confident and composed under competitive pressure (Gucciardi et al., 2021). Ultimately, a comprehensive sports training program promotes long-term development, ensuring continuous progress, consistent skill enhancement, and peak performance throughout an athlete's career.

Assessing a sports training program is essential for ensuring its effectiveness, efficiency, and sustainability with the athlete's developmental goals. Regular assessments play a crucial role in performance optimization, as they monitor improvements in key areas such as strength, endurance, agility, and skill execution, confirming that training interventions yield measurable results. They also contribute significantly to injury prevention by identifying potential risk factors and allowing adjustments in training intensity, load management, and recovery strategies to minimize the chance of overuse injuries (Wilke et al., 2020).

Through personalized training plans, assessments help modify programs to each athlete's unique strengths, weaknesses, and physiological responses, ensuring more targeted and effective training. Additionally, evaluating tactical and psychological readiness, including decision-making and mental resilience, ensures that athletes are mentally prepared for the demands of competition. Utilizing scientific validation in the assessment process grounds training approaches in current sports science, making them more sustainable and efficient. Lastly, assessments promote accountability and continuous improvement by enabling coaches and athletes to track progress, refine methods, and maintain a training program that evolves to meet long-term development goals (Silva et al., 2021).

Statement of the Problem

The main objective of this research was to evaluate the sports training program for sports development in terms of its effectiveness, efficiency, and sustainability during the A.Y. 2024-2025.

Specifically, it sought to answer the following research questions:

1. What is the level of effectiveness of the sports training program across the following components;
 - a. pre-competition,
 - b. during-competition, and
 - c. post-competition?
2. What is the level of efficiency of the sports training program in terms of the following components;
 - a. program training design and instruction,
 - b. management resource, and
 - c. athlete progress data?
3. What is the level of sustainability of the sports training program along with the following components;
 - a. environmental sustainability,
 - b. financial sustainability, and
 - c. social sustainability?
4. What innovative plan can be proposed to enhance the existing sports training program?

Literature Review

Developing sports training programs is vital for athletic development and performance maximization, though to achieve physical abilities, an athlete must aim for a development plan encapsulating the specific environment at that point and performance-wise progress over time (Qizi, 2023). This individualized study would keep an athlete on a clear pathway toward improvement. Again, this is the hallmark principle of effective athlete development. The training programs have proven effective in enhancing athletic capabilities consistently, especially in a team-sport situation where collaboration and decision-making play a vital role in the performance

outcome (Cormier, et al. 2020). Even at that, bringing sports and physical activity into all life stages is important to ensure engagement and development (Rudd et al., 2020).

Then, employing effective pedagogies and strategies in developing sports training programs at different levels will teach one everything about harnessing the resources at training to improve participation and performance for all populations. Advancements in sports science have shaped much more advanced and flexible training programs (Nanclerio et al., 2022). Different characteristics of sports and athletes bring about many variations concerning creating annual training plans for specific needs, ensuring the best possible outcomes.

Efficiency through actionable data requires that performance outcomes be optimized. Evaluation should also present together with critical scrutiny of both the extant and developing applications of tracking for team sports (Torres-Ronda et al., 2022). Such activity forms part of gathering objective data and then coupling it with practical insights so that effective training plans can be developed and efficiency in the performance of the athlete is embedded into an action plan for continuous improvement of the program.

Most improvements in this area are tangible, showing the role of sport in advancing sustainable development as witnessed through the Sport for Development (SFD) paradigm. Such impact translates even to society, manifestly within or beyond the SFD bounds, to have more sporting initiatives that further embed sustainability into respective sporting practices (Millington et al., 2022). A comprehensive analysis of sustainability and elements relating to the particular concept would lead to identifying the key determinants of long-term sustainability in sports training programs.

II. Methodology

The research utilized a descriptive survey methodology. This investigative strategy sought to delimit and interpret the current conditions, practices, procedures, patterns, principles, and other elements. It pertains to occurrences characteristic of the normal condition.

The current study survey presents the ongoing forms, trends, and existing views in a structured and thorough manner. It studies and interprets the present conditions regarding sports training programs for athletes and coaches within the province of Aurora. Additionally, it provides sufficient time to analyze current conditions, delving into insights beyond immediate observations.

Survey checklists verify the number of specific inquiries, procedures, or actions undertaken or completed by a researcher. Utilizing diverse formats during data collection, analysis, and subsequent stages is crucial for writing or revising content for presentation. The term "survey" refers to the systematic process of gathering data concerning the current status of the existing sports training program.

The descriptive research method extends beyond mere data collection and tabulation to include comprehensive data interpretation, highlighting the significance of both description and analysis. This approach incorporates measurement and evaluation, offering a thorough assessment of the existing sports training program.

Population and Locale of the Study

The focus of the study was to assess training programs for sports development, evaluating their effectiveness, efficiency, and sustainability. It was delimited to the existing component of the sports training program's effectiveness, efficiency, and sustainability. The sources of data were the observable four-point score ratings drawn from the 5 Units of Maria Aurora, Aurora School District Units; the survey covered approximately 288 participants from fifty-six (56) in Unit I, seventy (70) in Unit II, fifty-seven (57) in Unit III, fifty-nine (59) in Unit IV and forty-six (46) in Unit V of Maria Aurora School District.

Data Gathering Tools

In this study, data were collected using a structured questionnaire designed to assess various components of the sports training program. The questionnaire employed a four-point Likert scale. The intentional exclusion of a neutral midpoint aimed to encourage respondents to express definitive opinions, thereby reducing central tendency bias a common issue where participants may default to neutral responses, potentially obscuring their proper attitudes. This forced-choice format enhances the clarity and interpretability of the data by prompting more decisive responses.

Overall, the methodological choices of employing a forced-choice Likert scale and analyzing responses through weighted mean calculations ensured the reliability, validity, and analytical rigor of the study's descriptive findings. These practices align with established descriptive research methodologies for evaluating athletic training interventions, facilitating a robust assessment of the program's effectiveness.

Data Gathering Procedure

To begin, the researcher submitted a request to the District Supervisor's Office and the MAPEH District Coordinator's Office for specific data to determine the proper sample size. This was done to determine the suitable sample size. Following the collection of samples using the sample collection method, a letter was sent to the School Division Office requesting permission to conduct a survey of athletes, coaches, and stakeholders. After that, appointments were made with the participants who responded to the survey the previous day.

The participants who took part in the survey were given questionnaires to complete. To collect the required information, the researcher who was conducting the study distributed the questionnaire to the individuals participating in the study. When the researchers had finished

delivering the instruction, they immediately provided the respondents with the opportunity to fill out the questionnaire.

The information used in this inquiry was collected through the use of questionnaires, which served as the primary tool. During the research project, the researcher was directly responsible for gathering all the variables indicated earlier. For the sake of protecting the findings and maintaining their secrecy, this was done.

III. Results and Discussion

The results of this study reveal that the existing sports training program in the Maria Aurora District demonstrates notable strengths in terms of its effectiveness during various phases of athlete preparation. With weighted means across pre-, during-, and post-competition phases consistently falling under the "effective" category, the training program has shown competency in establishing structured, science-based, and goal-oriented interventions. However, these outcomes are tempered by moderate performance in areas such as facility maintenance and pre-competition preparedness, signaling the need for enhanced support systems and resource mobilization.

The findings on efficiency further establish that while instructional design and monitoring of athlete progress are adequately addressed through modern technologies and strategic planning, resource management particularly in budgeting and athlete welfare support services—exhibits limitations. The lack of consistent access to medical, psychological, and nutritional services poses a barrier to optimal athlete development and holistic well-being.

In terms of sustainability, the program receives strong backing from community stakeholders, reflecting high social cohesion and collective support. Nevertheless, its financial sustainability is inadequate, with no precise mechanisms in place to ensure long-term funding and systematic investment. Environmental sustainability, though recognized, is not institutionalized within the current framework, requiring more deliberate efforts to align with national policy mandates and ecological principles.

These insights underscore the necessity of reimagining the current sports training framework. There is a pressing need to institute a comprehensive and data-driven Sports Development Plan at the district level that integrates efficiency, effectiveness, and sustainability. The proposed direction must prioritize long-term resource allocation, modernized infrastructure, scientific training support, and inclusive development to transform the program into a replicable model for athletic success and community empowerment.

IV. Conclusion

Enhancing the sports training program across the pre-, during-, and post-competition phases through improved training schedules, clearly defined objectives, practical assessments, and tailored phase-specific activities can significantly optimize athlete readiness, performance, and recovery, ultimately leading to improved overall outcomes.

While the sports training program is generally effective in its design, teaching methods, resource use, and athlete progress monitoring, its overall impact can be enhanced by improving teaching strategies, strengthening the training plan, managing the budget and facilities more efficiently, and refining assessment and tracking methods through thoughtful planning and data-driven improvements to better support athletes' needs and performance.

The sports training program is stable in terms of environmental, financial, and social sustainability. However, it can improve its long-term effectiveness by enhancing eco-friendly practices, improving resource management, effective budgeting, and securing new funding. Promoting inclusivity, long-term participation, and community involvement will further strengthen its impact.

V. Recommendations

Local government units should implement sustainable strategies to enhance training facilities and coaching staff, including regular facility inspections, digital tracking, energy-efficient upgrades, and structured evaluations. Strengthening coaching involves performance-based contracts, digital resources, peer mentoring, and collaboration with agencies, ensuring long-term readiness, accountability, and improved athletic performance at all phases.

It is recommended that the sports training program adopt a flexible, data-driven approach to improve its design and instruction, establish a coordinated support system for medical, nutritional, and psychological services, and implement a structured, technology-supported injury recovery monitoring system ensuring more effective training, enhanced athlete well-being, and safer recovery outcomes.

It is recommended that the sports training program enhance its sustainability by upgrading to energy-efficient facility systems, strengthening social inclusion through community partnerships and subsidies, and promoting social cohesion with mentorship programs and inclusive events. This approach ensures that the program supports environmental goals, maintains financial transparency, and fosters long-term community impact.

The administrators are encouraged to implement and sustain the Sports Training Program in the District of Maria Aurora to promote sustainable development.

Future researchers are encouraged to explore further studies on the sports training program, particularly its impact on both coaches and athletes.

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