

Evaluating the Effectiveness of Solutions for Developing Sport and Physical Education Resources at Vietnam National University Ho Chi Minh City

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Abstract:

This study evaluates the effectiveness of solutions for developing sport and physical education (SPE) resources at Vietnam National University Ho Chi Minh City (VNU-HCM) in the context of higher education reform and the increasing demand for sustainable sport development. A mixed-methods approach was employed, including document analysis, sociological surveys, quasi-experimental observation, and statistical analysis.

The findings reveal that short-term solutions have generated significant improvements, particularly in organizational structure and governance, highlighted by the establishment of the VNU-HCM Sport Center in 2019. Positive impacts were also observed in human resource development, curriculum standardization, expansion of physical education courses, and enhancement of sport movements across the system.

However, the effectiveness remains uneven, especially in areas requiring substantial investment such as infrastructure, digital management systems, and resource socialization. The study confirms the feasibility and practical value of short-term solutions while providing a foundation for implementing long-term strategies toward 2030.

Keywords: evaluation; effectiveness; sport resources; physical education; higher education

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1. INTRODUCTION

In contemporary higher education, sport and physical education (SPE) are increasingly recognized as essential components of holistic student development and institutional sustainability. The effectiveness of SPE systems depends heavily on the availability and quality of resources, including human capital, infrastructure, financial capacity, governance mechanisms, and the ability to mobilize social resources. Empirical studies have demonstrated that institutional policies, teaching models, and organizational structures significantly influence student participation, learning outcomes, and physical activity behavior (Brown et al., 2024; Choi et al., 2021).

From a systems perspective, the development of SPE resources requires coordinated governance, strategic planning, and continuous evaluation. Previous research highlights that aligning curriculum design, instructional practices, and institutional management can significantly enhance student motivation and engagement in physical education (Kim et al., 2015; Kim & Cardinal, 2019). In addition, modern approaches emphasize data-driven governance and performance-based evaluation frameworks for improving educational quality (Yang & Li, 2024).

Vietnam National University Ho Chi Minh City (VNU-HCM) is a large multidisciplinary university system with a diverse structure of member institutions and a substantial student population. In recent years, SPE activities have gradually improved, contributing to student health promotion and the development of a comprehensive educational environment. However, several challenges remain, including fragmented organizational structures, insufficient specialized personnel, uneven infrastructure distribution, and limited effectiveness in coordination and resource mobilization (VNU-HCM, 2019a, 2019b; Sport Center, VNU-HCM, 2022, 2023).

Given these challenges, the development and implementation of solutions for SPE resource enhancement are both theoretically significant and practically necessary. However, the scientific value of such solutions must be validated through systematic evaluation of their effectiveness in practice (Brown et al., 2024).

Therefore, this study aims to evaluate the effectiveness of selected solutions for developing SPE resources at VNU-HCM by analyzing implementation outcomes and examining changes in key indicators before and after intervention. The findings are expected to contribute to evidence-based management, policy formulation, and sustainable development of SPE systems in higher education.

2. Methods

2.1 Research Design

This study adopts a mixed-methods design combining qualitative and quantitative approaches to evaluate the effectiveness of SPE resource development solutions.

2.2 Data Collection

Data were collected from:

Official policy documents and institutional decisions (2019–2025)

Annual reports of the VNU-HCM Sport Center

Sociological surveys and field observations

Statistical datasets reflecting changes in SPE resource indicators

2.3 Research Methods

The following methods were employed:

Document analysis and synthesis to establish theoretical and practical foundations

Sociological survey to collect stakeholder perspectives

Quasi-experimental approach comparing pre- and post-intervention indicators

Statistical analysis to identify trends and measure effectiveness

2.4 Evaluation Framework

The evaluation focuses on five dimensions:

Organizational structure and governance

Human resource development

Training and curriculum management

Professional activities and sport movements

3. Results

3.1. Implementation Roadmap for Applying Solutions to Develop SPE Resources at VNU-HCM

Based on the selected groups of solutions for developing sport and physical education (SPE) resources, the study formulated an implementation roadmap for Vietnam National University Ho Chi Minh City (VNU-HCM) that is aligned with the practical conditions of the entire system. The implementation was carried out with clear priorities, phased timelines, and continuity across stages, in order to gradually improve governance, develop human resources, enhance the efficiency of facility use, and promote SPE activities throughout VNU-HCM. The solutions for developing SPE resources at VNU-HCM were organized for implementation in a manner consistent with the actual conditions of the whole system, ensuring continuity, coherence, and focal emphasis. Based on their nature and implementation timeline, the roadmap was divided into two groups: short-term solutions and long-term solutions. The short-term solutions focused on improving governance, establishing regulations and procedures, applying information technology, enhancing coordination efficiency, and improving working conditions; the long-term solutions focused on institutional and policy refinement, workforce development, infrastructure investment, and the strategic orientation of sustainable SPE development across VNU-HCM. The implementation process involved coordination among the VNU-HCM Executive Board, functional divisions, member universities, and relevant units. On the basis of this roadmap, the study monitored and assessed changes in indicators reflecting SPE resources in order to determine the practical effectiveness of the solutions.

Table 1. Short-term solutions for developing SPE resources at VNU-HCM

No.	Solution content	Implementation period
1	Develop regulations on standards for managers and leaders in the SPE sector.	2018–2020 and adjusted in subsequent years
2	Develop regulations on the qualifications and professional competence of personnel involved in SPE activities.	2018–2020 and adjusted in subsequent years
3	Develop regulations on work style and working routines in SPE activities.	2018–2020 and adjusted in subsequent years
4	Develop regulations on communication and behavioral culture.	2018–2020 and adjusted in subsequent years
5	Develop regulations on standards for selecting SPE human resources.	2018–2020 and adjusted in subsequent years
6	Develop regulations on the management, coordination, and efficient use of SPE resources.	2018–2020 and adjusted in subsequent years
7	Formulate a project for developing SPE resources at VNU-HCM.	2018–2020 and adjusted in subsequent years
8	Apply information technology in SPE governance.	2018–2020 and adjusted in subsequent years
9	Apply management software in the administration of SPE activities.	2018–2020 and adjusted in subsequent years
10	Complete the management process for training and academic affairs in physical education across the system.	2018–2020 and adjusted in subsequent years
11	Develop a system of criteria to evaluate governance effectiveness and staff quality (KPI).	2018–2020 and adjusted in subsequent years
12	Strengthen inspection, examination, and supervision of teaching hours and professional activities.	Ongoing
13	Ensure that information is updated promptly and accurately for relevant stakeholders.	Ongoing
14	Clearly assign functions and responsibilities to avoid overlap in work.	Ongoing
15	Increase the attention and close direction of superiors toward subordinates.	Ongoing
16	Build a comfortable and open working environment.	Ongoing
17	Create conditions for individuals to freely propose ideas.	Ongoing

18	Encourage creativity in work.	Ongoing
19	Create conditions for the development of individual capabilities.	Ongoing
20	Improve the mechanism for assigning and compensating teaching hours in a transparent manner.	Ongoing
21	Strengthen professional and technical training for SPE lecturers.	Ongoing
22	Build a working environment associated with efficiency and individual responsibility.	Ongoing
23	Increase the attention and direction of VNU-HCM leadership regarding SPE activities.	Ongoing
24	Increase the attention of leaders of member universities regarding SPE activities.	Ongoing
25	Build and promote inter-university linkages within VNU-HCM in developing SPE movements.	Ongoing
26	Strengthen the support and coordination of internal units for SPE activities.	Ongoing
27	Establish the VNU-HCM Sport Center under VNU-HCM.	2018–2019 and continued refinement during 2020–2025

Table 2. Long-term solutions for developing SPE resources at VNU-HCM

No.	Solution content	Implementation period
1	Develop policies for the advancement of SPE lecturers and management staff.	2021–2030 and adjusted in subsequent years
2	Develop policies to attract and retain high-quality SPE human resources.	2021–2030 and adjusted in subsequent years
3	Develop policies for training and professional development of high-quality SPE human resources.	2021–2030 and adjusted in subsequent years
4	Develop appropriate policies for SPE human resource development.	2021–2030 and adjusted in subsequent years
5	Develop policies for investment in infrastructure serving SPE activities.	2021–2030 and oriented toward subsequent stages
6	Develop policies to promote student recreational sport.	Ongoing during 2021–2030
7	Develop policies to invest in SPE for staff and employees of VNU-HCM.	Ongoing during 2021–2030
8	Develop policies to support the compilation, appraisal, and use of physical education textbooks.	2021–2030 and adjusted in subsequent years
9	Develop policies encouraging the expansion of new physical education courses in line with student demand.	2021–2030 and oriented toward subsequent stages
10	Develop policies to support the growth of SPE clubs and annual recreational activities.	Ongoing during 2021–2030
11	Promote the strength of the system and the distinctive characteristics of VNU-HCM in training and nurturing high-quality human resources.	2021–2030 and implemented on an ongoing basis
12	Set SPE development goals aligned with the VNU-HCM development strategy to 2030.	2021–2030
13	Strengthen cooperation in SPE training and scientific research.	Ongoing during 2021–2030
14	Develop SPE activities with a distinct VNU-HCM identity to serve the entire system.	2021–2030 and implemented on an ongoing basis

3.2. Test Results on the Effectiveness of Selected Solutions for Developing SPE Resources at VNU-HCM

Among the system of solutions for developing SPE resources at VNU-HCM, the study focused only on testing selected short-term solutions, because these were the solutions that had already been implemented in practice,

provided sufficient conditions for monitoring, and yielded clear evidence for assessing effectiveness. The test results are presented under the following dimensions: (1) impact on organizational structure and governance; (2) impact on SPE human resource development; (3) impact on training, academic affairs, and management of physical education courses; (4) impact on professional activities, SPE movements, and system linkage; and (5) impact on facilities and financial resources serving SPE activities.

3.2.1. Results of the impact on organizational structure and governance

The clearest impact of the short-term solution group was seen in the consolidation of the organizational structure and the establishment of a dedicated SPE management unit at the VNU-HCM level. On 8 October 2019, the Director of VNU-HCM issued Decision No. 2128/QĐ-ĐHQG on the establishment of the VNU-HCM Sport Center; subsequently, on 15 November 2019, Decision No. 1439/QĐ-ĐHQG was issued concerning the Regulations on the Organization and Operation of the VNU-HCM Sport Center. These two legal milestones are the most important evidence showing that the solution of building a centralized SPE organizational model had been realized in practice.

The establishment of the Sport Center was highly significant because, prior to that, the organization, staffing, and management of physical education teaching activities among VNU-HCM units had not been standardized; some units did not organize physical education departments; and there was no unified curriculum, training load, duration, or common assessment method across the system. Therefore, the formation of the Sport Center helped address an urgent practical need by creating a centralized hub for managing, coordinating, and organizing SPE activities across the system.

During the 2024–2025 period, the impact of the governance solutions continued to be reflected in the Center’s intensified review of legal documents, monitoring of the implementation of regulations and rules, establishment of councils and professional groups to support administration, and completion of a job-position project together with the issuance of internal operating regulations according to plan. These results indicate that the effect of the solution did not stop at the point of establishment but continued to be maintained and refined in practical governance.

Table 3. Results of the impact of solutions on organizational structure and governance, 2019–2025

Year	Achievements	Significance of impact	Practical evidence
2019	Established the Sport Center and issued its Regulations on Organization and Operation	Formed a dedicated SPE organizational hub for the entire system	Decision No. 2128/QĐ-ĐHQG; Decision No. 1439/QĐ-ĐHQG
2020	Initial stabilization of the organizational structure	Transitioned from establishment to actual operation	Continued operation of the new organizational model under the issued regulations
2021	Strengthened coordination mechanisms	Created a foundation for the next phase of improvement and expansion	Maintained the organization and implemented coordination functions for physical education and SPE in the system
2022	The organizational model became more stable	Demonstrated the sustained effectiveness of the solution	Continued organizational and professional administration activities
2023	The structure played a stronger coordinating role	Impact extended into training and SPE activities	Continued management of teaching, professional activities, and sport movements
2024	Internal management mechanisms were further refined	Governance solutions were concretized in administrative practice	Review of documents; monitoring of regulation compliance; establishment of councils and professional groups
2025	Organizational and administrative processes were standardized	Governance impact was maintained and further developed	Completion of the job-position project; issuance of the Center’s operational regulations

Comment:

The results show that the impact of the short-term solutions on organizational structure and governance was evident throughout the 2019–2025 period. If 2019 marked the establishment of the organizational focal point and legal foundation, then the subsequent years show that this structure continued to operate, consolidate, and become more standardized. Thus, the solution had a clear cumulative and developmental effect.

3.2.2. Results of the impact on SPE human resource development

The impact of the short-term solutions on SPE human resources was reflected in the gradual expansion of the workforce, improvement in professional qualifications, and more systematic implementation of personnel work. The 2019–2021 period was one of initial reception, organizational stabilization, and early personnel consolidation after the establishment of the Center. From 2022 onward, the reports began to provide clearer quantitative data on the Center’s staffing.

According to the 2022 report, the Center had 34 staff members; this increased to 37 in 2023 and 39 in 2024. According to updated data provided by the unit in 2025, the total number of staff continued to remain at 39. In terms of qualifications, in 2022 there were 5 doctoral degree holders, 24 master’s degree holders, and 5 bachelor’s degree holders; in 2023 there were 6 doctoral degree holders, 25 master’s degree holders, and 6 bachelor’s degree holders; in 2024 there were 6 doctoral degree holders, 27 master’s degree holders, and 6 bachelor’s degree holders; and in 2025 there were 7 doctoral degree holders, 26 master’s degree holders, and 6 bachelor’s degree holders. In the 2025 staffing structure, the unit had 10 managers and 9 specialists, while the remaining positions were basically stable compared with the previous year. This sequence of data shows that, once established, the personnel apparatus was gradually consolidated and qualitatively improved.

In addition, planning, appointment, and staff development were implemented more systematically during the 2024–2025 period. The 2024 report recorded the review and supplementation of the cadre planning for the 2021–2026 and 2026–2031 periods, the reappointment of the Director and Deputy Director, and the establishment of the staff recruitment council. In 2025, the unit continued to conduct training and development activities for reserve staff. This reflects that the short-term solutions concerning selection standards, workforce development, and professional competence enhancement were effective in practice.

Table 4. Changes in the scale and qualifications of SPE human resources, 2019–2025

Year	Total staff	Doctoral degree	Master’s degree	Bachelor’s degree	Evidence / notable features
2019	—	—	—	—	Initial formation of personnel structures after the Center’s establishment
2020	—	—	—	—	Continued operation and personnel consolidation
2021	—	—	—	—	Personnel consolidation and refinement
2022	34	5	24	5	First clear quantitative staffing data
2023	37	6	25	6	Staff size increased; team quality improved
2024	39	6	27	6	The workforce continued to become more standardized in terms of qualifications
2025	39	7	26	6	Number of doctoral degree holders increased; organizational structure became more stable

Table 5. Selected results of the impact on personnel work and workforce development, 2019–2025

Year	Main content	Significance of impact
2019	Formation of the Center’s staffing focal point	Created the basis for workforce consolidation
2020	Continued reception and stabilization of staffing	Transitioned from formation to operation
2021	Consolidated the workforce under the new organizational model	Created a foundation for future human resource development
2022	Maintained a workforce of 34 staff members	Ensured regular operation
2023	Increased to 37 staff members; postgraduate-level personnel continued to grow	Showed a trend toward workforce standardization
2024	Reviewed and supplemented cadre planning; reappointed leaders; established the staff recruitment council	Personnel work became more systematic
2025	Continued development of reserve staff; management structure included 10 managers and 9 specialists	The impact was maintained continuously and became more stable

Comment:

Tables 4 and 5 show that the impact of the short-term solutions on SPE human resources was evident throughout the 2019–2025 period. The 2019–2021 period was primarily one of organizational consolidation and staff stabilization; from 2022 onward, the data show gradual growth in both scale and quality. This confirms that the short-term solutions contributed substantively to improving SPE human resources at VNU-HCM.

3.2.3. Results of the impact on training, academic affairs, and management of physical education courses

After the establishment of the Sport Center, the impact of the short-term solutions on training and management of physical education courses was reflected in the gradual centralization of management, curriculum standardization, and expansion of teaching content. The 2019–2021 period was one of preparation and stabilization of the organizational focal point for physical education teaching across the system. From 2022 to 2025, the quantitative evidence became clearer.

According to the activity reports, in 2023 the Center organized physical education teaching for 18,001 students in the second semester, 1,278 students in the summer semester, and 16,620 students in the first semester of the 2023–2024 academic year. In 2024, the unit implemented the VNU-HCM Physical Education curriculum for undergraduate level under Decision No. 1471/QĐ-ĐHQG dated 20 October 2023, while also organizing teaching for 15,951 full-time students in the second semester of the 2023–2024 academic year and for 798 students in the summer semester. The Center also piloted two new courses, Pickleball and Bowling, and conducted surveys of students and training institutions regarding course content and teaching quality.

By 2025, the Center continued to organize all three semesters in an academic year and maintained the development of the physical education curriculum in a more flexible, diversified, and adaptable direction. Textbook development also improved: in 2024, the Center issued regulations on the compilation, selection, appraisal, approval, and use of textbooks, lecture materials, and reference materials, and established a task group to develop the project for compiling physical education textbooks. These outcomes reflect the clear impact of the short-term solutions on training, academic affairs, and professional standardization.

Table 6. Results of the impact on physical education training, 2019–2025

Year	Implementation results	Significance of impact
2019	A centralized focal point for physical education teaching was established	Created the basis for unified management of physical education across the system
2020	The training and academic affairs focal point continued to operate	Organizational stabilization of teaching activities
2021	Physical education teaching management was maintained	Created a foundation for later expansion
2022	Teaching activities continued to be implemented for member units	Training activities were maintained stably
2023	18,001 students in the second semester; 1,278 in the summer semester; 16,620 in the first semester	Large teaching scale, demonstrating system-wide coordination capacity
2024	15,951 students in the second semester; 798 in the summer semester; new curriculum applied; Pickleball and Bowling piloted	Curriculum standardized and new content expanded
2025	All three semesters were organized in the academic year; the curriculum continued to develop in a flexible and diversified manner	Training became increasingly proactive, stable, and adaptive

Table 7. Results of the impact on textbook development and professional standardization, 2019–2025

Year	Implementation results	Significance of impact
2019	A focal point for professional standardization was formed	Created the foundation for curriculum and learning material standardization
2020	Professional organization continued to stabilize	Transitioned from the start-up phase to operation
2021	Physical education professional activities were maintained	Created a basis for deeper adjustment and standardization
2022	Teaching and academic affairs activities continued to be refined	Prepared for the curriculum innovation phase
2023	The physical education training program was reviewed	Created the basis for the revised curriculum implementation
2024	Regulations on the compilation, selection, appraisal, approval, and use of textbooks were issued; a task group for the textbook compilation project was established	Learning materials and professional standards were standardized
2025	The orientation toward standardizing the curriculum and course content continued to be implemented	The impact was maintained and further developed

Comment:

The results indicate that the impact of the short-term solutions on physical education training was quite clear from 2019 to 2025. The early stage was devoted to establishing the organizational focal point, while from 2023 onward the data became more explicit regarding teaching scale, curriculum standardization, and innovation in course content. This shows that the short-term solutions not only had immediate effects but also laid the foundation for improving the quality of physical education across the system.

3.2.4. Results of the impact on professional activities, SPE movements, and system linkage

After the establishment of the Sport Center, the impact of the short-term solutions on grassroots sport activities and system linkage became increasingly evident. The 2019–2021 period was mainly one of organizational setup, structural stabilization, and the establishment of coordination mechanisms. From 2022 onward, the outcomes of movement-oriented activities and system linkage were more clearly reflected in the reports.

The 2024 report recorded that the Center completed 100% of its emulation and extracurricular sport activity tasks, successfully coordinated the Student and Staff Sports Festival of VNU-HCM in 2024, supported the training of men’s and women’s volleyball, football, and basketball teams, and successfully coordinated the VNU-HCM Student Basketball Championship in 2024. The 2025 report showed even greater outreach, with the Center implementing 40 recreational sport activities, supporting 9 units within VNU-HCM, dispatching 20 staff assignments for professional support, and establishing a staff volleyball club and a staff pickleball club.

In terms of professional activities, in 2024 the Center organized a scientific research workshop and produced 2 international publications, 3 domestic publications, and 2 conference proceedings. These outcomes show that the impact of the short-term solutions extended beyond mass sport movement and into the academic and professional activities of the unit.

Table 8. Results of the impact on SPE movements and system linkage, 2019–2025

Year	Implementation results	Significance of impact
2019	A system-level SPE organizational focal point was formed	Created the basis for coordination of movements and inter-unit linkage
2020	The coordination mechanism for SPE activities continued to stabilize	Organizational operation and adaptation phase
2021	SPE activities within the system were maintained and consolidated	Created the basis for expanding sport movements
2022	System-level SPE activities continued to be implemented	Coordination among units became more evident

2023	Professional activities and sport movements were maintained	Prepared for stronger future development
2024	Extracurricular SPE activities reached 100%; Student and Staff Sports Festival was coordinated; Student Basketball Championship was organized	Movements were organized with a focal point, scale, and system
2025	40 recreational sport activities were organized; 9 units were supported; 20 staff assignments were made; 2 clubs were established	Outreach and system linkage increased markedly

Table 9. Results of the impact on professional activities, 2019–2025

Year	Implementation results	Significance of impact
2019	A professional focal point within the Center was established	Created the basis for unified professional activities
2020	The professional structure continued to operate	Basic professional activities were maintained
2021	Professional support activities within the system were strengthened	Increased the Center’s professional role
2022	Professional activities linked with training and sport movements were maintained	Created the basis for academic development
2023	Professional activities were intensified and curriculum innovation was prepared	Improved the linkage between professional work and training
2024	Scientific research workshop; 2 international papers, 3 domestic papers, 2 conference proceedings	Enhanced academic capacity of the staff
2025	Continued professional training, support for teaching methods, and learner feedback	Professional impact was extended and stabilized

Comment:

The results show that the impact of the short-term solutions on sport movements, system linkage, and professional activities became increasingly clear over time. The 2019–2021 period was mainly devoted to building the focal point and coordination mechanism; by 2024–2025, the impact became more visible through indicators of recreational activity, unit support, and professional-academic output. This indicates that the solutions helped transform SPE activities at VNU-HCM from fragmented initiatives into a networked and coordinated system.

3.2.5. Results of the impact on facilities and financial resources serving SPE activities

The overall findings show that after the establishment of the Sport Center, the VNU-HCM sports complex covered an area of 29.5 hectares and initially received an investment of approximately VND 10 billion, including mini football fields, basketball courts, volleyball courts, tennis courts, and auxiliary works. This constituted an important initial material foundation for SPE activities across the system. At the same time, further development directions were identified for major facilities such as a 20,000-seat stadium, a 1,500-seat swimming pool, a 5,000-seat multipurpose gymnasium, and a multipurpose training hall.

During the 2019–2021 period, the main impact was reflected in the establishment of a centralized management focal point and the gradual operation of existing facilities for training, sport movements, and SPE activities. From 2024 to 2025, the reports show that the Center continued regular maintenance, maintained the exploitation of existing facilities, and completed one section of perimeter fencing around the field area, forming a green boundary strip. However, many major items such as the swimming pool, gymnasium, training management software, and an 11-a-side football field were still under development. This indicates that the impact of the short-term solutions in the area of facilities was present, but mainly at the stage of initial improvement and maintenance of use.

In financial terms, the 2024 report showed that the Center’s financial resources were not yet diversified and were mainly composed of state budget allocations and physical education tuition fees. By 2025, there was more positive progress in teaching-related income, with tuition revenue reaching VND 9.86 billion per year, equivalent to 109.6% of the target. However, income from services and facility exploitation reached only VND 40.76 million per year, equivalent to 3.05% of the target, and fundraising and sponsorship activities had not yet met expectations. Thus, within the short-term solution group, the clearest financial impact was in stabilizing and strengthening training-related revenue, while socialization and service exploitation remained limited.

Table 10. Results of the impact on facilities and financial resources, 2019–2025

Year	Implementation results	Significance of impact
2019	A management focal point for the sports complex and related facilities was formed	Created the basis for centralized management, exploitation, and investment
2020	Existing facilities continued to be operated and used	Ensured minimum conditions for SPE activities
2021	Facility use for training and sport movements was maintained	Created a foundation for later improvement
2022	Continued use and coordinated exploitation of shared facilities	Improved the efficiency of existing material resources
2023	Facility exploitation was linked to a larger physical education training scale	Material resources directly supported training
2024	Continued coordination in the use and maintenance of facilities; financial resources mainly came from the state budget and physical education tuition	Showed that supporting conditions still depended heavily on existing resources
2025	Regular maintenance; completion of a section of fencing/green corridor; tuition revenue reached VND 9.86 billion and service revenue reached VND 40.76 million	Positive effects in maintaining facilities and stabilizing training revenue, but service exploitation remained weak

Comment:

The results show that the impact of the short-term solutions on facilities and financial resources was present but uneven. Positive effects were seen in the formation of a management focal point, the existence of an initial material base, ongoing maintenance, and the stabilization of training income. However, progress in service exploitation, revenue diversification, and synchronized infrastructure investment remained limited. This is consistent with the nature of these areas, which require more time and larger resource inputs to produce substantive results.

3.2.6. General remarks on the results of testing the effectiveness of the selected solutions

From all the test results, it can be concluded that several short-term solutions for developing SPE resources at VNU-HCM have demonstrated practical and relatively clear effectiveness. The most prominent impact was in organizational structure and governance, as shown by the establishment of the VNU-HCM Sport Center and the issuance of its Regulations on Organization and Operation in 2019. This is the strongest evidence of effectiveness, because it shows that the proposed research solution was directly transformed into a specific management outcome.

The short-term solutions also generated positive impacts on SPE human resource development, standardization of physical education training, expansion of the course portfolio, enhancement of sport movements, and strengthening of linkages among units in the system. The sequence of evidence from 2019 to 2025 shows that the Center’s personnel grew gradually in both quantity and quality, teaching activities and sport movements became more systematically organized, and professional and scientific research activities also improved.

However, the test results also indicate that the effectiveness of the short-term solution group was not uniform across all areas. Fields requiring substantial investment or depending heavily on financial mechanisms, such as the comprehensive completion of large-scale facilities, integrated management software, resource socialization, and service exploitation, only achieved initial outcomes. This suggests that the short-term solutions play a foundational role, creating an initial transition and paving the way for long-term solutions to continue producing effects through 2030.

In general, the evidence from 2019 to 2025 allows us to affirm that some short-term solutions for developing SPE resources at VNU-HCM are feasible, practically effective, and clearly applicable, especially in areas related to organizational structure, governance, workforce development, and physical education training. This provides an important basis for confirming the correctness and practical value of the solutions proposed by the study.

4. Discussion

The findings indicate that short-term solutions have been effective in generating structural and operational transformations, particularly in governance and human resource development. This result aligns with previous studies

emphasizing the critical role of institutional governance and organizational alignment in enhancing physical education outcomes (Brown *et al.*, 2024; Yang & Li, 2024).

The establishment of a centralized management unit reflects an important institutional innovation, consistent with global trends in university sport management and quality assurance systems (Choi *et al.*, 2021).

However, the uneven effectiveness across different resource dimensions highlights persistent challenges in higher education systems, where infrastructure development and financial diversification typically require long-term investment and systemic policy support (Yang & Li, 2024).

Furthermore, the findings confirm that short-term interventions serve as transitional mechanisms facilitating long-term transformation. This is consistent with prior research indicating that aligning instructional practices, curriculum design, and institutional structures is essential for sustaining student engagement and improving educational outcomes (Kim *et al.*, 2015; Kim & Cardinal, 2019).

5. Conclusion

This study demonstrates that the implementation of short-term solutions for developing SPE resources at VNU-HCM has produced meaningful and measurable impacts, particularly in organizational structure, governance, human resources, and training activities.

The establishment of the Sport Center serves as the most significant institutional outcome, providing a foundation for coordinated management and system-wide development.

However, limitations remain in infrastructure development, financial diversification, and resource socialization, indicating the need for continued investment and long-term strategic planning.

Overall, the findings confirm the feasibility and practical value of the proposed solutions and provide a strong empirical basis for scaling up long-term strategies toward sustainable SPE development by 2030.

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