

## From Compulsory Physical Education to Lifelong Physical Activity: A Systematic Review and Policy Analysis for Vietnamese Higher Education

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**ABSTRACT:** University physical education is widely organized as a compulsory academic requirement, but required attendance does not necessarily lead to sustained physical activity after course completion. This study examines how higher education policy can move from ensuring participation to developing the capability, motivation, and supportive conditions needed for lifelong physical activity. A systematic integrative review and qualitative policy analysis synthesized 22 academic sources and 10 authoritative policy or guidance documents through physical literacy, self-determination theory, the Capability-Opportunity-Motivation-Behaviour model, and a socioecological perspective. The evidence indicates that compulsory physical education provides an equity-based foundation by reaching students who might not participate voluntarily. Its long-term contribution, however, depends on competence, meaningful choice, enjoyment, social support, accessible facilities, flexible scheduling, and opportunities to continue after required credits. Vietnamese policy already recognizes exercise habits, self-training, elective content, extracurricular sport, and institutional responsibility, but implementation and accountability remain centered largely on course provision, credits, completion, and short-term fitness indicators. The article proposes a Four-C transition framework: compulsory foundation, capability development, meaningful choice, and institutional continuity. It recommends physical-literacy outcomes, diversified activity pathways, inclusive assessment, later-year participation, curriculum-club integration, responsible digital support, and outcome-based quality assurance. University physical education should function as the beginning of an active life rather than as a temporary graduation requirement.

**KEYWORDS:** physical education; lifelong physical activity; physical literacy; higher education; policy analysis; university students; Vietnam

### INTRODUCTION

Physical inactivity is a persistent global public-health and education challenge. The World Health Organization (WHO, 2020) recommends that adults undertake 150 to 300 minutes of moderate-intensity aerobic activity per week, or an equivalent combination of moderate- and vigorous-intensity activity, together with muscle-strengthening activity on at least two days. Nevertheless, the WHO (2022) estimated that 27% of adults did not meet recommended activity levels, while more recent global monitoring has indicated that inactivity has continued to rise. These patterns are consequential because regular activity contributes to the prevention of cardiovascular disease, diabetes, several cancers, and premature mortality, while also supporting mental health, sleep, social participation, and quality of life.

The transition from adolescence to early adulthood is a particularly sensitive period. Longitudinal evidence shows a substantial decline in physical activity as young people leave secondary school and move into university, employment, or other adult roles (Corder et al., 2019). University students often experience a combination of greater personal freedom and greater structural constraint. They may live away from family, commute long distances, work part time, and manage irregular academic schedules. They may also lose access to the organized sport and timetabled physical education that characterized earlier schooling. The habits established during this transition can persist after graduation, when occupational and family responsibilities further reduce discretionary time.

Higher education institutions therefore occupy a strategic position in the life course. They can expose almost an entire generation of future professionals to knowledge and experiences that support health, self-management, and social participation. Many systems have attempted to use this opportunity by requiring students to complete physical education or physical activity education courses. Compulsory provision offers an obvious advantage: it reaches students who are inactive, unconfident, or unlikely to enroll voluntarily. However, an academic requirement can also be experienced as a temporary compliance task. Students may attend until they obtain the required credit and then stop participating when external monitoring ends.

This tension creates a central policy problem. The immediate objective of compulsory physical education is participation

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in a course, whereas the broader educational and health objective is sustained participation in physical activity. These outcomes are related but not identical. Course attendance can be mandated; lifelong behavior cannot. The policy challenge is to design a compulsory experience that develops transferable capability and internalized motivation while creating realistic opportunities for students to remain active after the compulsory component has ended.

The issue is highly relevant to Vietnamese higher education. Decree No. 11/2015/ND-CP identifies physical education as a compulsory component of the national education system and connects it with movement skills, physical development, health, and exercise habits (Government of Vietnam, 2015). Circular No. 25/2015/TT-BGDDT requires undergraduate programs to include at least three credits of physical education and permits institutions to combine compulsory and elective content. It also states that the curriculum should form exercise habits and support comprehensive development (Ministry of Education and Training, 2015). Decision No. 1076/QĐ-TTg further emphasizes self-discipline, regular exercise, extracurricular sport, clubs, facilities, and flexible curricula (Prime Minister of Vietnam, 2016). More recently, Decision No. 973/QĐ-TTg approved the School Health Program for 2026-2035, creating a new opportunity to link physical education, student health, mental well-being, and digital health management (Prime Minister of Vietnam, 2026).

The Vietnamese legal framework therefore contains many elements associated with lifelong activity. The unresolved question is whether those objectives are translated into curriculum design, pedagogy, assessment, campus opportunity, and quality assurance. Formal compliance can be achieved when a university offers the required credits and students pass the course. Yet formal compliance does not reveal whether students become more confident, understand how to plan activity, participate after completing the course, or remain active after graduation.

International research has examined barriers and facilitators to university students' activity, the effectiveness of interventions, physical literacy, motivational processes, digital health tools, mental-health outcomes, and differences between required and elective policies. These literatures are often treated separately. Intervention research may identify short-term effects without considering education policy. Physical-literacy research may focus on individual attributes without examining institutional opportunity. Policy documents may express ambitious objectives without specifying behavioral mechanisms or measurable outcomes. An integrated synthesis is needed to connect evidence about students, teaching, environments, and policy instruments.

This study addresses that need through a systematic integrative review and qualitative policy analysis. It asks three questions: (a) What are the strengths and limitations of compulsory university physical education as a mechanism for promoting sustained physical activity? (b) Which educational, motivational, social, and environmental conditions support the transition from required participation to lifelong activity? and (c) how well does the Vietnamese policy framework support that transition, and what reforms are needed? The article contributes a Four-C framework consisting of a compulsory foundation, capability development, meaningful choice, and institutional continuity. The framework is intended to preserve the equity advantages of compulsory provision while redirecting implementation toward lifelong outcomes.

### **CONCEPTUAL FRAMEWORK**

A policy transition from compulsory physical education to lifelong physical activity requires conceptual clarity. Physical education, physical activity, exercise, and sport overlap, but they are not interchangeable. Physical activity refers broadly to bodily movement that increases energy expenditure. Exercise is planned and structured activity undertaken to improve or maintain fitness. Sport typically involves rules, skills, and varying degrees of competition. Physical education is an educational process through which students develop movement competence, knowledge, attitudes, values, and self-management skills. A student can pass a physical education course without becoming regularly active, just as a student can be active outside a formal course. The central concern of this article is therefore transfer: whether learning and experiences within university physical education can be transferred into self-directed activity across changing stages of life.

Lifelong physical activity is defined here as the sustained capability and willingness to select, organize, perform, and adapt health-enhancing physical activity across the life course. This definition includes four components. First, individuals require physical and cognitive capability, including movement competence, safety knowledge, and planning skills. Second, they require motivation, including enjoyment, confidence, value, and an emerging identity as an active person. Third, they require social and environmental opportunity, including time, facilities, affordability, and supportive relationships. Fourth, they require adaptability because preferred activities, physical capacities, work patterns, and family responsibilities change over time. A policy concerned only with performance in one university sport does not adequately address these components.

#### **Physical Literacy as a Transferable Educational Outcome**

Physical literacy offers the clearest educational bridge between formal physical education and independent activity. Whitehead (2010) conceptualized physical literacy as a disposition that integrates motivation, confidence, physical competence, knowledge, and understanding in support of purposeful engagement in physical activity throughout life. The concept moves beyond sport-specific proficiency. It asks whether a person can engage with varied movement environments, make informed choices, and

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adapt participation to personal circumstances.

The empirical evidence is promising but still developing. Carl et al. (2022) found that physical-literacy interventions produced positive effects on physical activity behavior, motivation and confidence, knowledge, and aspects of physical competence, although effects varied across intervention designs and populations. Ying et al. (2025) reported a positive relationship between physical literacy and physical activity in their systematic review and meta-analysis. Fortnum et al. (2025) concluded that physical literacy has become influential in explanations of physical activity and health, while also noting that causal pathways and adult applications require stronger evidence. In a university context, Kwan et al. (2020) demonstrated the feasibility of a physical-literacy-based intervention during the transition into university, and Liu et al. (2024) found that higher perceived physical literacy was associated with greater adherence to physical activity and other movement guidelines among Chinese university students.

These findings imply that university physical education should produce transferable outcomes. A graduate should be able to identify suitable forms of activity, perform them safely, monitor intensity and recovery, set realistic goals, locate resources, overcome common barriers, and revise an activity plan when circumstances change. Such outcomes are more closely connected to lifelong participation than a single test of speed, strength, or technical performance.

## Motivation, Behavior, and the Social Environment

Self-determination theory explains why external requirements can produce either temporary compliance or more durable engagement. Deci and Ryan (2000) distinguish autonomous motivation, in which behavior is experienced as enjoyable or personally meaningful, from controlled motivation, in which behavior is driven primarily by pressure, reward, or avoidance of punishment. Compulsory physical education begins with an external requirement, but the quality of the learning environment can influence whether students internalize the value of activity.

Three psychological needs are especially important. Autonomy is supported when students have meaningful choices and understand the rationale for learning. Competence is supported through achievable progression, constructive feedback, and opportunities to experience improvement. Relatedness is supported when lecturers and peers create an accepting and cooperative climate. A compulsory course that publicly compares students, privileges already skilled athletes, or offers no meaningful choice may strengthen avoidance. In contrast, a compulsory course can support autonomy when students select among equivalent pathways, establish personal goals, and understand how activities relate to their health and future lives.

The Capability-Opportunity-Motivation-Behaviour model complements this perspective by specifying that behavior requires capability, opportunity, and motivation (Michie et al., 2011). Capability includes knowledge, physical skills, confidence, and self-regulation. Opportunity includes time, facilities, safe environments, affordability, and social support. Motivation includes reflective processes such as goals and beliefs, as well as automatic processes such as habit and affect. Brown et al. (2024) mapped evidence on university students' physical activity to this model and identified lack of time, accessible options, exercising with others, and the prioritization of activity as recurring influences.

A socioecological perspective further emphasizes that inactivity is not simply an individual failure. Campus timetables, transport, residence, climate, facility opening hours, participation costs, gender norms, disability access, and peer networks shape the choices available to students (Sallis et al., 2006). The implication is that curriculum reform alone is insufficient. Lifelong participation requires coordination between physical education, student services, campus planning, health services, and extracurricular programs.

## The Four-C Transition Model

The conceptual synthesis supports a Four-C transition model. The first element is a compulsory foundation that guarantees universal educational exposure and protects equity. The second is capability development through physical literacy, health knowledge, movement competence, and self-management. The third is meaningful choice, which supports autonomy and enables students to identify activities compatible with their preferences and circumstances. The fourth is institutional continuity, which provides opportunities after required credits are completed and connects university learning with community and post-graduation activity. Equity, inclusion, supportive environments, and outcome-based governance operate across all four elements. The model does not treat compulsory and elective provision as mutually exclusive. Instead, compulsion establishes a minimum entitlement, while capability, choice, and continuity convert that entitlement into the possibility of sustained behavior.

## METHOD

The study used a systematic integrative review combined with qualitative policy analysis. An integrative design was appropriate because the research questions concerned empirical effects, behavioral mechanisms, educational concepts, and institutional policy. A conventional effectiveness review restricted to randomized trials would not capture the evidence required to examine compulsory-course policy, physical literacy, motivation, inclusion, or implementation. The review was informed by PRISMA 2020 principles of transparent searching, eligibility, and synthesis, but no new statistical meta-analysis was conducted because the evidence was heterogeneous in population, intervention, measurement, and follow-up (Page et al., 2021).

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## Search Strategy and Corpus

Searches were conducted and updated between July 1 and July 10, 2026. Academic sources were identified through PubMed-indexed records and publisher platforms, including BMC, SpringerLink, Oxford Academic, PLOS, JMIR, Taylor & Francis, Elsevier, and MDPI. Search terms combined setting terms (university, college, higher education, undergraduate), intervention terms (physical education, physical activity education, required course, compulsory physical education), behavioral terms (physical activity, lifelong activity, motivation, barriers, facilitators, physical literacy), and design terms (systematic review, meta-analysis, intervention, policy). Backward reference searching was used to identify foundational theory and policy studies.

Vietnamese legal and policy documents were retrieved from official government and Ministry of Education and Training repositories. International guidance was retrieved from WHO and UNESCO. The final analytical corpus contained 22 academic sources and 10 authoritative policy or guidance documents. The academic corpus intentionally combined systematic reviews, meta-analyses, longitudinal research, intervention studies, cross-sectional university studies, and foundational theoretical works. Policy documents were selected because they defined objectives, responsibilities, curriculum requirements, health standards, infrastructure, or implementation arrangements relevant to higher education physical activity.

## Eligibility and Appraisal

Academic studies were eligible when they focused wholly or substantially on university or college students; examined physical education, physical activity participation, physical literacy, motivation, barriers, intervention effects, or relevant policy; used an identifiable research method; and generated findings relevant to sustained participation. Publications from 2015 through June 2026 were prioritized, with earlier works retained when they were foundational to theory or higher education policy. Studies focused exclusively on elite athletes, clinical rehabilitation, or school-age populations without transferable implications were excluded.

Each academic source was appraised qualitatively for clarity of the question, appropriateness of design, transparency of sampling or searching, quality of physical activity measurement, follow-up duration, control of confounding, attention to equity, and relevance to university policy. Systematic reviews and meta-analyses were given greater interpretive weight than individual cross-sectional studies. Cross-sectional associations were not treated as causal. Intervention findings were interpreted more strongly when they included comparison groups, objective measures, and post-intervention follow-up.

Policy documents were analyzed through six dimensions: problem definition, objectives, policy instruments, institutional responsibilities, monitoring and evaluation, and equity. International evidence was then compared with Vietnamese policy to identify areas of alignment, implementation gaps, and feasible reforms. Thematic synthesis was guided deductively by physical literacy, self-determination theory, COM-B, and socioecological levels, while inductive coding identified recurring themes concerning reach, motivation, time, accessibility, continuity, digital support, mental well-being, and inclusion.

## Ethics

The study used published research and publicly available policy documents. It involved no human participants, personal data, or direct institutional observation. Ethical approval and informed consent were therefore not required.

## RESULTS

The evidence base supports a qualified conclusion: compulsory physical education is valuable as a universal foundation, but compulsory status is not a sufficient mechanism for lifelong physical activity. Sustained participation emerges from the interaction of capability, motivation, opportunity, and continuity. The literature is strongest in identifying barriers, short-term intervention effects, and plausible motivational mechanisms. It is weaker in providing long-term causal evidence that a particular university physical education model produces activity after graduation.

**Table 1: Synthesis of the International Evidence Base**

| Evidence domain   |        | Principal finding                                                                                                 | Policy implication                                                                             |
|-------------------|--------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Compulsory        | versus | Required courses reach students with lower initial motivation; electives attract more self-selected participants. | Retain a universal foundation, but use autonomy-supportive teaching and continuation pathways. |
| Physical literacy |        | Competence, confidence, motivation, knowledge, and understanding are positively related to physical activity.     | Define transferable physical-literacy outcomes rather than relying only on sport performance.  |

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| Evidence domain              | Principal finding                                                                                             | Policy implication                                                                                                   |
|------------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Barriers and facilitators    | Time, access, social support, cost, and prioritization consistently shape participation.                      | Coordinate curriculum with timetables, facilities, affordability, and peer opportunities.                            |
| Intervention effectiveness   | Multicomponent interventions can increase activity, but effects are heterogeneous and often short term.       | Combine structured opportunity, goal setting, feedback, self-monitoring, and follow-up.                              |
| Digital support              | Digital interventions can increase steps, but effects on intensity and sedentary time are inconsistent.       | Use digital tools as voluntary support, not as a substitute for accessible environments or as punitive surveillance. |
| Mental and social well-being | Physical activity interventions can reduce anxiety, depression, and stress, although evidence quality varies. | Integrate physical education with student well-being and health services while avoiding medicalization.              |

**Note.** Findings are synthesized from the academic corpus rather than treated as a new meta-analysis.

## Compulsory Physical Education Extends Reach

The most defensible rationale for compulsory physical education is equity of reach. Elective courses are more likely to attract students who already possess interest, competence, confidence, or previous sport experience. Required provision reaches students with lower motivation and those who would otherwise avoid activity. Kim and Cardinal's (2016) policy review concluded that required physical activity education can improve access to structured learning and may influence behavior and motivation, although evidence varied across institutional contexts. Their later comparison of universities with required and elective policies found that the required policy included more students with low self-determined motivation (Kim & Cardinal, 2019). This finding is sometimes interpreted as a weakness of compulsory provision, but it can also be read as evidence of its equity function: the students most difficult to engage remain inside the educational system rather than being selected out.

Abolishing the requirement would therefore create a risk of stratification. Active and sport-confident students would continue through elective courses and clubs, while students with low competence, negative prior experiences, disability, financial constraint, or limited knowledge could receive no structured support. Compulsory provision establishes physical education as an educational entitlement rather than a consumer choice available mainly to those already prepared to use it.

Reach, however, is only the beginning of the causal chain. Exposure does not demonstrate learning, and learning does not necessarily produce sustained behavior. The policy significance of required courses depends on what happens within them and what opportunities exist afterward.

## Compulsory Status Alone Does Not Produce Lifelong Behavior

The comparison between required and elective provision exposes a motivational paradox. Students in elective courses frequently report stronger autonomous motivation because they have already chosen to participate. Students in required courses may include more inactive or amotivated individuals. It would be methodologically inappropriate to compare the two groups without accounting for self-selection and then conclude that compulsion causes weaker motivation. The relevant question is whether a required course improves motivation and capability among students who would otherwise remain inactive.

Available studies suggest that course quality matters but does not automatically overcome environmental constraints. Ahmed and Al Salim (2024) found that perceived quality physical education was related to competence-oriented satisfaction, yet the relationship with overall physical activity was not straightforward. Boiché et al. (2020), using accelerometry and motivational measures during physical education, also demonstrated that participation intensity and motivation are connected in complex ways and that the structure of lessons influences the activity students actually perform. These findings support a distinction between being present in a course and being engaged in meaningful movement.

Compulsory courses can even produce adverse long-term associations when they are experienced as humiliating, excessively competitive, or irrelevant. The evidence synthesized in physical education research consistently suggests that public comparison, narrow sport curricula, and assessment based primarily on absolute performance disadvantage students with low initial competence. Students may pass the course while reinforcing the belief that physical activity is not for them. A lifelong orientation therefore requires an explicit theory of transfer, not merely a minimum number of contact hours.

## Capability Is a Necessary Bridge

Physical literacy emerged as the most useful representation of the capability that should be transferred beyond university.

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Carl et al. (2022) reported positive intervention effects across several physical-literacy domains, and Ying et al. (2025) identified a positive pooled relationship between physical literacy and activity. Fortnum et al. (2025) cautioned that the field still relies heavily on cross-sectional evidence and that the relationship among physical literacy, activity, and health is not always tested as a complete causal model. Nevertheless, the convergence of conceptual and empirical evidence supports the use of physical literacy as an educational outcome.

University capability should include more than sport technique. Students need to understand basic training principles, recognize safe intensity, respond to pain and fatigue, plan a realistic week, and select activities compatible with health status and access. They need strategies for common transitions: moving from campus to employment, adapting when work becomes sedentary, returning after illness, exercising without specialized facilities, and modifying activity during family formation or aging. Capability also includes navigating environments—knowing how to find a community facility, join a beginner group, or use digital information critically.

Kwan et al. (2020) showed that a physical-literacy-based intervention can be introduced during the transition to university. Liu et al. (2024) found that students with higher physical literacy were more likely to meet movement guidelines, although the cross-sectional design prevents causal inference. Taken together, the findings justify a policy shift from sport completion standards toward a multidimensional graduate outcome: students should be able to select, plan, perform, monitor, and adapt safe physical activity.

### **Autonomy-Supportive Teaching Enables Internalization**

Compulsory status does not require controlling pedagogy. Self-determination theory suggests that external regulation can become more internalized when the learning environment supports autonomy, competence, and relatedness (Deci & Ryan, 2000). Autonomy can be supported by allowing students to choose among equivalent activity pathways, set personal goals, and understand the rationale for course tasks. Competence can be supported through progressive instruction, individual feedback, and evaluation of improvement. Relatedness can be supported through respectful lecturer behavior, cooperative tasks, and beginner-friendly peer environments.

Meaningful choice is particularly important because students differ in health, body confidence, culture, gendered experience, prior sport participation, and preference for competition or solitude. A curriculum that offers only conventional team sports may meet administrative definitions of physical education while failing to provide a viable activity identity for many students. Choice should include walking and running, swimming, strength training, dance, martial arts, yoga and mobility, cycling, outdoor recreation, adapted activity, traditional games, and noncompetitive group exercise. The objective is not an unlimited menu at every institution, but a sufficiently diverse set of pathways that students can discover at least one form of activity they can realistically continue.

Choice must also be genuine. A university may list several modules while scheduling them at the same time, restricting places, or imposing additional fees. Such arrangements create nominal rather than substantive autonomy. Monitoring should therefore examine demand, waiting lists, participation by student group, and the compatibility of activities with academic timetables.

### **Time, Access, and Social Support Shape Opportunity**

Lack of time is the most consistent barrier in the university literature. Ferreira Silva et al. (2022) reviewed 59 studies involving high school and university students and identified lack of time, lack of motivation, and lack of accessible places as the principal barriers. Brown et al. (2024) similarly identified time, accessibility of options and equipment, exercising with others, and prioritization as dominant COM-B and theoretical-domain influences. Deliens et al. (2015) demonstrated through qualitative research that university students' activity and sedentary behavior are shaped by individual preferences, social networks, physical environments, and university characteristics.

Time should not be interpreted solely as a personal management problem. Institutional schedules can create long blocks of classes, unpredictable gaps, evening study, internships, and extensive commuting. Facilities may be open only during hours when students are in class. Activity spaces may be concentrated on one campus while students study elsewhere. A policy that instructs students to exercise without addressing these constraints risks moralizing a structural problem.

Opportunity also includes affordability and social safety. Facilities can exist but remain inaccessible because of fees, intimidating cultures, inadequate changing spaces, disability barriers, or perceptions that they are intended for skilled athletes. Social support is consistently associated with engagement. Beginner groups, peer mentors, interfaculty recreation, and cooperative classes can reduce anxiety and make participation more enjoyable. Continuity is therefore partly an environmental design problem: universities must create low-threshold opportunities that fit students' actual lives.

### **Interventions Work Best When They Are Multicomponent**

Intervention reviews indicate that universities can increase activity, but effects are heterogeneous and often short term. Plotnikoff et al. (2015) found that tertiary institutions are promising settings for interventions targeting physical activity, diet, and weight, while emphasizing methodological limitations. More recent evidence continues to show variability in intervention type,

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duration, and measurement. The recurring implication is that information alone is insufficient. Effective programs usually combine structured opportunity with behavioral techniques such as goal setting, self-monitoring, feedback, social support, and problem solving.

Digital tools can extend these components, but they are not a substitute for an enabling environment. Bi et al. (2024) found that digital health interventions significantly increased step counts among college students, but did not produce significant pooled effects for light activity, moderate-to-vigorous activity, or sedentary time. This pattern suggests that digital prompts and wearables may support simple and observable behaviors such as walking while being less capable of changing more demanding activity or prolonged sitting without complementary organizational changes.

Digital support is most defensible when it helps students set personally relevant goals, monitor progress voluntarily, access learning resources, and connect with suitable opportunities. It is less defensible when it becomes compulsory surveillance or when device data determine grades unrelated to demonstrated learning. Institutions should provide non-digital alternatives, minimize data collection, obtain informed consent, and separate health data from punitive academic decisions.

## Physical Activity Supports Mental and Social Well-Being

The benefits of university physical activity are not limited to fitness. Donnelly et al. (2024) found that many higher education physical activity interventions improved mental health or quality-of-life outcomes. Huang et al. (2024), in a systematic review and meta-analysis of 59 studies, found moderate effects on anxiety, depression, and stress, but rated the overall certainty of evidence as very low because of bias, heterogeneity, and limited reporting of intervention fidelity. The cautious interpretation is that physical activity is a promising mental-health promotion strategy, not a replacement for professional care.

This broader benefit has motivational implications. Young adults may respond more strongly to immediate experiences—enjoyment, stress relief, social connection, energy, and sleep—than to distant warnings about chronic disease. Courses that help students notice these immediate outcomes may support internalization. Integration with counseling, student health, residence services, and well-being programs can also create additional entry points for students who do not identify with competitive sport.

## Equity Requires Inclusive Participation

Formal universality does not guarantee substantive inclusion. Students differ in disability, chronic health conditions, body size, gender, financial resources, cultural expectations, prior experiences, and access to equipment. A compulsory system can reproduce inequality when it assesses all students through identical performance standards or treats exemption as the principal accommodation for disability.

An inclusive approach provides adapted but meaningful participation. It uses universal-design principles, confidential health consultation, differentiated intensity, accessible facilities, and equivalent learning outcomes. Students who cannot perform a particular activity should still be able to develop planning skills, health knowledge, confidence, and competence in suitable forms of movement. Equity monitoring should examine not only enrollment and completion but also participation quality, choice availability, facility use, enjoyment, and continuation across student groups.

## Policy Analysis of Vietnamese Higher Education

Vietnam has a stronger formal foundation for university physical education than systems in which provision is entirely elective. The legal framework identifies comprehensive development and exercise habits as national educational objectives, gives institutions curriculum autonomy, requires facilities and safety, and recognizes extracurricular activity. The analysis nevertheless reveals a gap between lifelong aspirations and course-centered implementation.

**Table 2: Alignment of Vietnamese Policy With Lifelong Physical Activity**

| Policy dimension      | Existing Vietnamese foundation                                                                | Remaining gap                                                                                               |
|-----------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Universal access      | Physical education is compulsory in higher education.                                         | Participation is frequently treated as course compliance rather than the first stage of a lifelong pathway. |
| Curriculum            | At least three credits; institutional autonomy; compulsory and elective modules.              | No sufficiently explicit national physical-literacy or lifelong-activity graduate outcome.                  |
| Motivation and choice | Policy refers to positive attitudes, habits, self-training, and student selection of modules. | Limited operational guidance on autonomy-supportive pedagogy and substantive choice.                        |

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| Policy dimension           | Existing Vietnamese foundation                                                                               | Remaining gap                                                                                          |
|----------------------------|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Extracurricular continuity | Clubs, sport, and regular extracurricular participation are encouraged.                                      | Weak linkage between compulsory courses and participation in later years.                              |
| Infrastructure             | Institutions are responsible for facilities, equipment, safety, and resource mobilization.                   | Monitoring emphasizes provision more than accessibility, affordability, opening hours, and actual use. |
| Inclusion                  | Reduced, exempted, or alternative content is allowed for health conditions and disability.                   | An exemption-oriented approach may not ensure meaningful adapted participation.                        |
| Evaluation                 | Credits, completion, fitness, facilities, and implementation can be reported.                                | Limited measurement of physical literacy, enjoyment, confidence, continuity, and equity.               |
| Digital health             | National digital-transformation policy and the 2026-2035 School Health Program create an enabling framework. | Data governance, consent, non-digital alternatives, and educational purpose need clarification.        |

**Note.** The assessment compares formal policy provisions with conditions identified in the international evidence.

## A Strong Compulsory and Curricular Foundation

Decree No. 11/2015/ND-CP defines physical education as a compulsory subject and associates it with knowledge, movement skills, health, physical development, and exercise habits (Government of Vietnam, 2015). It distinguishes formal physical education from voluntary extracurricular sport. This distinction is logical: the formal curriculum can guarantee universal educational exposure, while extracurricular activity can provide continued participation and specialization.

Circular No. 25/2015/TT-BGDDT operationalizes the university curriculum. It requires a minimum of three credits, permits compulsory and elective modules, gives institutional leaders responsibility for program development, and requires programs to be publicized so that students can select and register for modules (Ministry of Education and Training, 2015). It also requires appropriate lecturers, facilities, safety arrangements, and alternative or reduced content for students with disabilities or health limitations. These provisions create considerable space for student-centered and locally adapted curricula.

The policy objective is broader than passing a sport test. Circular No. 25 states that the program should provide knowledge and basic movement skills, form exercise habits, improve health and physical development, contribute to personality, enhance learning capacity, and support social skills and positive attitudes. These objectives are substantially aligned with physical literacy and lifelong activity. The problem is not a lack of ambition in the formal objective; it is the absence of sufficiently specific common outcomes and longitudinal indicators.

## Extracurricular Sport and Continuity

Decision No. 1076/QĐ-TTg reinforces the objective of regular participation by promoting clubs, extracurricular activity, facilities, diversified content, and student self-discipline (Prime Minister of Vietnam, 2016). The policy recognizes that formal classes alone are insufficient. However, curriculum and extracurricular sport can remain administratively separate. Students may complete the required credits without receiving a structured transition into a club, recreation program, active-transport routine, or community opportunity.

The 2025 Ministry of Education and Training review reported that all higher education and vocational institutions organized physical education in accordance with Circular No. 25, with adaptation to institutional circumstances (Ministry of Education and Training, 2025). This demonstrates broad formal implementation. It does not establish that students remain active after the course, that physical-literacy outcomes are achieved, or that opportunities are equally accessible. Administrative coverage and behavioral effectiveness are different dimensions of performance.

## The Measurement and Accountability Gap

Current arrangements make it easier to measure inputs and immediate outputs than long-term outcomes. Institutions can report credits, course availability, lecturer numbers, facilities, student completion, fitness testing, and competition results. These indicators are useful but incomplete. They do not reveal whether students enjoy activity, feel competent, know how to plan independent exercise, use facilities after compulsory classes, or maintain activity during later years.

The exclusion of physical education grades from the cumulative grade-point average may prevent physical differences from distorting academic classification, but it may also contribute to the perception that the subject is peripheral. The solution is not necessarily to include raw performance scores in the GPA. A more appropriate approach is to assess educational learning—

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knowledge, planning, safety, participation, reflection, and personal improvement—while separating confidential health screening from academic judgment.

A national graduate outcome could provide coherence without eliminating institutional autonomy. For example: upon graduation, students should be able to select, perform, plan, monitor, and adapt safe physical activity appropriate to their health, preferences, and changing life circumstances. Universities could then choose locally appropriate activities while demonstrating how their curricula achieve the common outcome.

### **A New Policy Window: School Health and Digital Transformation**

Decision No. 131/QĐ-TTg on digital transformation in education provides an enabling framework for digital learning resources, student portfolios, and institutional information systems (Prime Minister of Vietnam, 2022). Decision No. 973/QĐ-TTg, issued on June 1, 2026, approved the School Health Program for 2026-2035 and explicitly includes higher education institutions (Prime Minister of Vietnam, 2026). The new program creates an opportunity to integrate physical education with physical and mental health, screening, health services, facilities, communication, and digital information.

Integration can correct the fragmentation between physical education, health services, counseling, student affairs, and extracurricular sport. It can also create risks if health and activity data are collected without clear educational purpose, consent, security, or limits on use. Digitalization should support learning and voluntary self-management rather than create a surveillance system. National guidance should therefore establish data minimization, informed consent, access controls, retention periods, and non-digital alternatives.

### **The Four-C Policy Framework for Vietnam**

The evidence and policy analysis support a transition that retains compulsory provision while changing its educational design and institutional context. The proposed Four-C framework is not a new subject added to the curriculum. It is a way of aligning existing credits, extracurricular resources, student health, and quality assurance around the stated objective of exercise habits and lifelong participation.

#### **Compulsory Foundation**

Vietnam should retain a minimum compulsory physical education foundation. The equity rationale is strong: universal provision reaches students with low motivation and limited previous opportunity. The foundation should guarantee basic movement and health education, safe participation, exposure to more than one form of activity, personal needs assessment, and preparation for independent activity.

Institutions should consider distributing required learning rather than concentrating all credits into a short early period. Repeated contact across the first two years may provide more opportunity for progression and habit development. The precise model should remain flexible because institutional calendars, facilities, and programs differ. The policy principle is that compulsory provision should initiate a developmental pathway, not simply create a hurdle for graduation.

#### **Capability Development**

A physical-literacy-oriented graduate outcome should supplement the minimum credit requirement. Common capability domains should include movement competence, confidence, motivation, knowledge, self-management, and the ability to navigate social and environmental opportunities. Students should learn to design a realistic weekly plan, monitor intensity, adapt activity for limited space or equipment, and identify strategies for interruption and return.

Assessment should be multidimensional. Absolute fitness measures may be useful for health information, but academic assessment should place greater weight on learning, safety, individual progress, planning, and reflection. A student who begins with low fitness but demonstrates substantial improvement and effective self-management has achieved an educational outcome that a single norm-referenced performance test may not capture.

#### **Meaningful Choice**

Every institution should offer a feasible range of pathways that includes both traditional sport and noncompetitive activity. Choice supports autonomy and increases the likelihood that students will identify an activity they can continue. Programs should analyze demand, participation gaps, and waiting lists rather than assume that the available menu reflects student needs.

Choice also requires inclusive alternatives. Adapted activity should be designed as meaningful education, not as a lesser substitute. Participation costs should be transparent and minimized. Equipment requirements, clothing norms, scheduling, and campus location should be reviewed for their effects on female students, students with disabilities, commuting students, and students with limited financial resources.

#### **Institutional Continuity**

The most important reform is to create a bridge after compulsory credits. Universities should provide low-barrier opportunities throughout the remaining years of study: zero- or one-credit continuation modules, open recreation, peer-led groups,

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beginner clubs, short courses, active-transport programs, and partnerships with community facilities. Competitive teams should remain part of campus life but should not be the only visible pathway.

Every compulsory course should end with a personal continuation plan. The plan could identify a preferred activity, likely barriers, available campus or community opportunities, a realistic weekly schedule, and strategies for returning after interruption. Participation after the course should be encouraged rather than graded through coercive monitoring. The aim is to support ownership and continuity.

## Implementation, Lecturer Development, and Quality Assurance

Lecturers are central to the Four-C model. Professional development should include autonomy-supportive teaching, physical-literacy assessment, inclusive and adapted activity, motivational communication, mental-health awareness, digital pedagogy, and formative feedback. Lecturer evaluation should recognize contributions to student engagement and continuation, not only sport performance or competition results.

Implementation also requires whole-institution governance. Academic affairs units should coordinate with facility managers, health services, counseling centers, student affairs, disability services, residences, and student organizations. Timetables should protect realistic activity periods, and facilities should be available beyond class hours. Campus planning should support walking, cycling, changing facilities, and access across multiple locations.

Quality assurance should retain input indicators while adding outcomes. A core dashboard could include reach and completion, perceived physical literacy, enjoyment and confidence, weekly activity, participation after required credits, facility accessibility, activity diversity, well-being, and equity gaps. Not every indicator must be collected from every student annually. Institutions could report a small routine set and participate in periodic sample-based evaluation. The key change is to make continuity and capability visible within accountability systems.

**Table 3: Illustrative Outcome-Based Monitoring Framework**

| Domain          | Illustrative indicators                                                                       |
|-----------------|-----------------------------------------------------------------------------------------------|
| Reach           | Enrollment, completion, attendance, and participation by student group                        |
| Capability      | Movement competence, safety knowledge, planning ability, and perceived physical literacy      |
| Motivation      | Enjoyment, confidence, perceived autonomy, relatedness, and intention to continue             |
| Behavior        | Weekly activity, active transport, extracurricular participation, and sedentary time          |
| Continuity      | Participation after compulsory credits and follow-up in later academic years                  |
| Opportunity     | Facility access, opening hours, affordability, schedule compatibility, and activity diversity |
| Well-being      | Perceived stress management, social connection, sleep, and self-rated health                  |
| Equity          | Differences by gender, disability, financial constraint, residence, and prior experience      |
| Data governance | Consent, data minimization, access control, retention, and non-digital alternatives           |

**Note.** Indicators may be collected through routine reporting and periodic sample-based evaluation; they are not proposed as mandatory annual measures for every student.

## DISCUSSION

The review identifies a central paradox in university physical education. Compulsion is valuable precisely because it reaches students who are least likely to choose activity, but the external requirement can also limit internalization when it is implemented through controlling pedagogy and narrow assessment. The appropriate policy response is not to choose between compulsory and voluntary models. It is to use compulsory provision as an equitable foundation and then build the capability, choice, and continuity needed for autonomous behavior.

This interpretation clarifies why debates focused solely on whether physical education should be mandatory are incomplete. A required course can be high quality or poor quality. An elective program can support autonomy but exclude the inactive. The outcomes depend on curriculum, pedagogy, environment, and transition pathways. Compulsory status is one policy instrument, not a complete theory of change.

The Vietnamese framework is unusually well positioned for reform because its stated objectives already include exercise habits, positive attitudes, self-training, elective content, and extracurricular participation. Major legal revision may therefore be less

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urgent than implementation guidance, outcome standards, and institutional incentives. The Four-C framework translates existing objectives into a more explicit causal sequence. Universal exposure creates the possibility of capability; capability and choice support internalization; continuity converts temporary participation into a sustainable practice.

The framework also reframes the meaning of educational quality. A technically demanding course is not necessarily a high-quality course if it primarily rewards students who arrived with prior skill. Quality should be judged by the extent to which the program expands each student's feasible opportunities for an active life. This requires progression, inclusion, and transfer. It also requires restraint in the use of fitness standards and digital data. Physical education should help students understand their bodies and environments, not classify or stigmatize them.

The policy analysis has implications beyond Vietnam. Many higher education systems separate academic physical education, campus recreation, competitive sport, health services, and well-being programs. Students encounter these as disconnected structures. A lifelong-activity approach treats them as components of one institutional ecosystem. This integration does not require that one department control every activity. It requires shared outcomes, referral pathways, coordinated scheduling, and common attention to equity.

The evidence also suggests that universities should avoid overpromising the effects of short interventions. Meta-analyses show beneficial effects, including mental-health outcomes, but heterogeneity and weak study quality remain important. Institutions should implement evidence-informed programs while building evaluation into reform. Longitudinal designs are needed to measure whether activity continues after the course and after graduation. Natural experiments comparing different curricular distributions, elective menus, and continuation models would be especially valuable.

A practical implementation strategy would begin with diverse pilots. Institutions should differ in region, size, disciplinary profile, facility capacity, and student population. Pilots should test common outcomes while allowing different activities and delivery models. Evaluation should examine both average effects and distributional effects. A program that produces a modest average increase but substantially benefits previously inactive students may have greater equity value than a program that mainly improves outcomes among already active students.

The 2026-2035 School Health Program provides a timely institutional window. Physical education can contribute to physical and mental health promotion, but it should not be reduced to health surveillance. The strongest model combines education, opportunity, and voluntary support. Digital tools can assist planning and feedback, but the essential policy assets remain capable lecturers, inclusive curricula, accessible environments, and opportunities that persist beyond the compulsory semester.

### **LIMITATIONS AND RESEARCH PRIORITIES**

This study has several limitations. First, the integrative review combined different forms of evidence and did not calculate a new pooled effect. The conclusions identify patterns and policy mechanisms rather than a single estimate of effectiveness. Second, the search relied on accessible bibliographic records and publisher platforms, and the review was conducted by one researcher. Duplicate independent screening would reduce selection and interpretation bias. Third, much of the university evidence is cross-sectional or based on short interventions. Associations among physical literacy, motivation, and activity should not be interpreted automatically as causal. Fourth, international findings may not transfer directly to every Vietnamese institution because resources, culture, climate, and student schedules differ. Fifth, policy documents indicate formal commitments but do not demonstrate consistent implementation across universities. Finally, Decision No. 973/QĐ-TTg was issued only in June 2026, so its effects cannot yet be evaluated.

Future research should measure students before physical education, at course completion, in later years, and after graduation. Studies should combine self-report with objective activity measurement and qualitative accounts of meaning and barriers. Comparative institutional research should test whether distributed courses, diverse activity pathways, or structured continuation produce stronger long-term outcomes. Research should also examine heterogeneous effects by gender, disability, socioeconomic position, commuting status, and prior sport experience. Cost and feasibility analysis will be essential because reforms that depend on expensive facilities or devices may be difficult to scale across the Vietnamese system.

### **CONCLUSION**

Compulsory physical education remains an important and defensible component of Vietnamese higher education. It creates universal access and reaches students who would not voluntarily participate. However, required attendance should not be confused with lifelong behavior. Sustained activity depends on physical literacy, autonomy, competence, enjoyment, social support, time, accessible environments, and opportunities that continue after the required course.

Vietnamese policy already contains many of these aspirations. The principal gap is between broad objectives and a system of implementation and accountability centered on credits, provision, completion, and immediate fitness. The Four-C framework offers a practical transition: retain a compulsory foundation, develop transferable capability, provide meaningful choice, and create institutional continuity. University physical education should ultimately be judged not only by whether students pass a course, but

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by whether they leave university able, motivated, and supported to remain active throughout life.

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### Appendix A

#### Illustrative Search Strings

1. (university OR college OR higher education OR undergraduate) AND (compulsory physical education OR required physical education OR physical activity education policy) AND (motivation OR participation OR continuation)
2. (university OR college OR higher education) AND (physical literacy OR lifelong physical activity) AND (curriculum OR intervention OR policy OR behaviour)
3. (university student OR undergraduate) AND physical activity AND (barrier OR facilitator OR time OR environment OR social support)
4. (university student OR higher education student) AND (physical activity intervention OR physical education intervention) AND (systematic review OR meta-analysis OR randomized)
5. (giáo dục thể chất OR hoạt động thể thao trong nhà trường) AND (giáo dục đại học OR sinh viên OR trường đại học) AND (chính sách OR chương trình OR quy định OR đánh giá)



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