



# TRENDS IN BADMINTON PARTICIPATION AMONG UNIVERSITY STUDENTS IN HANOI

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## Abstract

The study “Trends in Badminton Participation among University Students in Hanoi” was conducted to explore the current situation, motivations, frequency, and benefits of playing badminton among the student community. Using a qualitative research method combined with sociological surveys (451 valid questionnaires, including 365 students who know how to play badminton). Data were collected and processed using Excel software, the research results focus on clarifying the trend of playing badminton among students, including: frequency, reasons for playing badminton, benefits, locations, and playing partners. Although this sport brings many benefits, there still exist certain limitations, particularly the potential negative effects on health if practiced incorrectly. In addition, specialized facilities, training movements, and technical guidance... are still incomplete. Based on that, the research team proposes several solutions to promote the habit of playing badminton among university students in Hanoi.

## Keywords:

*Badminton, trends, university students, university, Hanoi.*

## 1. Introduction

In contemporary society, engaging in sports enhances physical health, contributes to mental well-being, reduces stress, improves concentration, and elevates overall quality of life. Sports function as a medium for social connection, fostering teamwork, resilience, and self-discipline. Among various popular sports, badminton is regarded as a suitable option for individuals across age groups due to its flexibility, affordability, accessibility, and adaptability to limited playing spaces. In addition, badminton promotes agility, reflexes, hand-eye coordination, and cardiovascular endurance.

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University students represent a youthful and dynamic demographic with a strong demand for physical training to maintain health, relieve academic pressure, and foster social interaction. However, in the context of rapid technological development and increasingly dense schedules of study and work, sustaining regular sports habits among students has become more volatile. Among available options, badminton is gradually emerging as a leading trend due to its convenience and ease of organization within campus areas, dormitories, or indoor halls. Numerous student badminton clubs have been established, attracting a large number of regular participants, reflecting the growing interest of young people in this sport.

Studying the trend of badminton participation among university students not only provides insights into the current state of physical training habits among young adults, but also holds significant implications for physical education and the strategic development of sports initiatives within universities and colleges. Through this research, practical solutions can be proposed to encourage students to maintain a healthy lifestyle and achieve a balance between academic pursuits and physical activity. Furthermore, the study contributes empirical data for educational administrators, Youth Union and Student Association in coordinating and facilitating sports activities, particularly the promotion of badminton within the student community.

Recognizing the growing importance of badminton participation among students, the research team has chosen to analyze the “Trends in Badminton Participation Among University Students in Hanoi.” This study focuses on examining the current badminton engagement of students at universities across Hanoi. Using a qualitative research approach combined with sociological surveys, the paper addresses key questions such as how frequently students play badminton, their motivations, and the benefits they gain. Based on the findings, the research team offers several discussion points to help promote and strengthen badminton participation among university students in the future.

## **2. General Overview of Badminton**

### ***- Theoretical Foundations of Badminton***

Badminton is a competitive racket sport in which players hit a shuttlecock over a net with the aim of landing it in the opponent’s court. The sport traces its origins to a game called “Poona” in India, which was later introduced to England and evolved into modern badminton; since 1992, badminton has been recognized as an official Olympic sport. Beyond its physical benefits such as improving health, reflexes, agility, and discipline, badminton is also a popular recreational activity that fosters social interaction and entertainment. In terms of technique, players must master fundamental skills (grip, serve, smash, footwork) and apply appropriate strategies (singles or doubles) to perform effectively in matches (Nguyen Duc Thanh & Do Tan Phong, 2013).

Badminton has a long-standing history, originating from traditional shuttlecock games in India and China. However, the development of badminton as a modern sport began in England in the late 19th century. In 1992, badminton was officially recognized as an Olympic sport (VNBSports, 2025).

Badminton is a competitive sport played either between two individual athletes (singles) or between two pairs of athletes (doubles) on a rectangular court divided equally by a net. Players score points by using a racket to hit the shuttlecock so that it lands in the opponent's court or when the opponent commits a fault. Each side is allowed only one contact to return the shuttlecock. Faults are determined by the main referee or line judges. In informal matches without referees, players resolve disputes through mutual agreement. Each rally results in one point, and a game ends when one side reaches the required number of points first (VNBSports, 2025).

### ***Benefits of Playing Badminton***

- *Enhances speed and reflexes:* Badminton is a high-intensity sport with fast shuttle speeds, requiring players to react quickly and accurately to each shot.

- *Builds muscular strength:* Constant movement on the court strengthens the leg muscles, especially the thighs and calves, improving stability and agility. Arm muscles are also developed through powerful strokes aimed at sending the shuttle swiftly to the opponent's side.

- *Improves physical fitness:* Continuous activity boosts endurance and flexibility. Badminton functions as a form of cardio exercise, helping burn calories and maintain a healthy physique. When combined with proper nutrition, regular training can also support effective weight loss.

- *Boost emotional well-being:* Playing badminton, like any sport, stimulates the release of endorphins, promoting happiness and reducing stress and anxiety. Practicing with friends also fosters social bonding and strengthens interpersonal relationships.

### **3. Research methodology**

To study “*Trends in Badminton Participation among University Students in Hanoi*”, The research team used two research methods: desk research (reviewing published documents in the media) and sociological survey (collecting response forms from target subjects). The data will be compiled and analyzed using Excel software.

Using desk research methods, the research team reviewed documents on general sports participation trends as well as specific studies on badminton, articles related to the trend of playing badminton habit in particular among Vietnamese students at university published in the media. From there, the research team proceeded to build a survey form to conduct a sociological investigation on playing badminton trends among Vietnamese students at university in Hanoi.

Regarding the sociological investigation method, the research team conducted a preliminary survey and discussed with interested people who have used and are playing badminton. Discussion participants are free to express their opinions on aspects related to badminton. The preliminary research sample size was 10 people. The preliminary research results were used to complete the research questionnaire. After having a complete survey, the research team sent and collected the survey via the link on Google Form (<https://forms.gle/gEWmUJx36zjS6hKk6>) combined with direct survey with students at university in Hanoi.

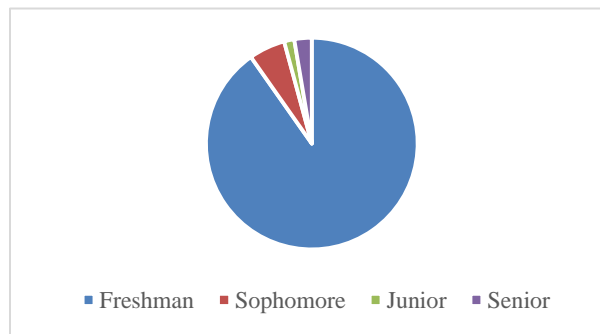
The data collection method was conducted by the research team based on the convenience sampling method and the “snowball” method (a method of finding the next subject based on the suggestion or introduction of the subject just interviewed) to ensure sufficient sample size as required. The number of survey ballots collected was 451, with 365 people know how to play badminton, the remaining 86 students have never or do not play badminton.

## 4. Research Findings

### 4.1. Descriptive Statistics of Survey Participants

The study surveyed a total of 451 university students using a structured questionnaire. Among the respondents, freshmen accounted for the largest proportion with 407 students (90.2%), followed by sophomores with 25 (5.5%), juniors with 7 (1.6%), and seniors with 12 (2.7%). These results indicate that the sample was predominantly composed of first-year students - individuals who are in the early stages of adapting to university life and are more susceptible to factors influencing the formation of sports-related habits.

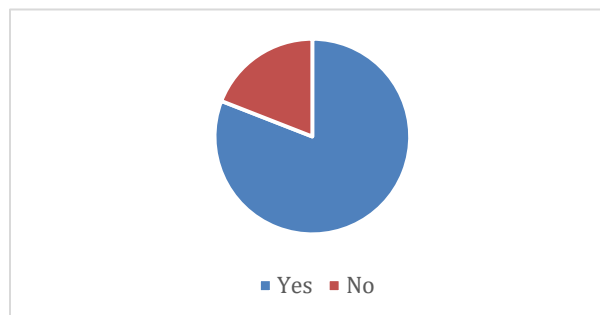
**Figure 1. Distribution of Surveyed Students by Academic Year**



*Source: Survey results*

Out of a total of 451 surveyed students, 365 (80.9%) reported that they know how to play badminton, while 86 students (19.1%) responded “No”. This indicates a relatively high level of popularity of badminton among university students, yet a notable proportion of students have not yet been exposed to or engaged with the sport.

**Figure 2. Proportion of Students Who Know How to Play Badminton**

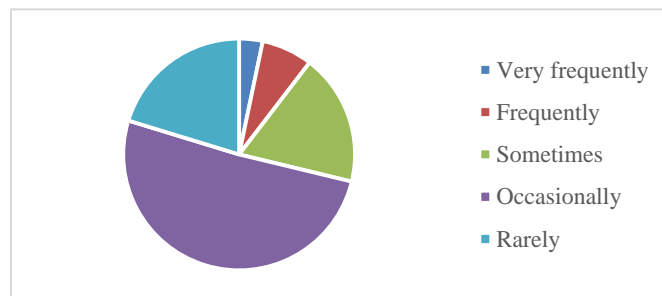


*Source: Survey results*

#### 4.2. Trends in Badminton Participation Among University Students in Hanoi

Among the 365 students who reported knowing how to play badminton, the group that plays “occasionally” accounted for the highest proportion, with 186 students (51%). This was followed by those who “rarely” play, comprising 20.3%, indicating that a considerable number of students tend not to maintain regular engagement with the sport. The “moderate” playing group made up 18.4%, while only 7.1% reported playing “frequently.” Notably, just 12 students (3.3%) stated that they play badminton “very frequently,” reflecting a relatively **low percentage of individuals who maintain consistent participation**. These findings suggest that although badminton is a familiar and relatively popular sport among university students, the habit of regular sports participation has not yet been strongly established, with most students engaging at an infrequent level.

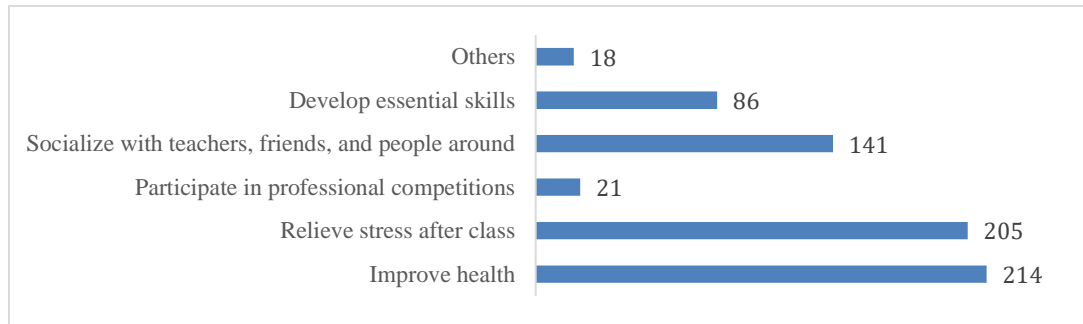
**Figure 3. Frequency of Badminton Play**



*Source: Survey results*

Survey results show that among the 365 students who know how to play badminton, the most commonly selected reason was “**to improve health**”, chosen by 214 students (58.6%). This is an understandable outcome, as in the context of academic pressure and prolonged sitting during study hours, maintaining a sport that enhances physical fitness is considered a top priority. The second most cited reason was “**to relieve stress after class**”, with 205 responses (56.2%), reflecting a clear need among students to balance study and relaxation through physical activity. The reason “**to socialize with teachers, friends and people around**” ranked third with 141 votes, indicating that badminton is not merely a sport but also a social activity that fosters connection and bonding within the academic environment.

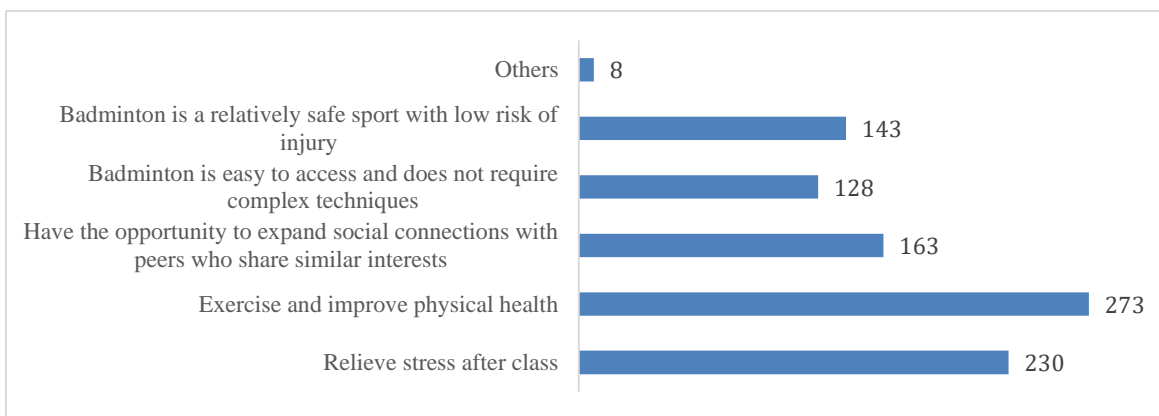
Other purposes such as “**to develop essential skills**” (86 votes) or “**to participate in professional competitions**” (21 votes) accounted for lower percentages, suggesting that most students approach badminton with the aim of improving health and mental well-being rather than pursuing a professional athletic path. Additionally, 18 students (4.9%) selected other purposes, demonstrating the diversity in how students engage with the sport. Overall, it can be concluded that **badminton among university students is primarily a recreational and community-oriented activity**, playing a vital role in maintaining physical health and emotional balance rather than focusing on competitive achievements.

**Figure 4. Purposes of playing/training in Badminton**

*Source: Survey results*

When asked about the benefits of playing badminton, the majority of students selected “to exercise and improve physical health”, with 273 votes (74.8%) - this figure reinforces the conclusion that health-related motivation is the primary driver behind students’ engagement in the sport. The second most cited benefit was “relieving stress after class,” chosen by 230 students (63%), indicating that badminton is perceived as an effective outlet for mental relaxation, well-suited to the demands of academic life.

Notably, 163 students (44.7%) stated that badminton helps “expand social connections with peers who share similar interests,” affirming its role in fostering a vibrant student community. Additionally, 143 students (39.2%) considered badminton to be “a relatively safe sport with low risk of injury,” while 128 students (35.1%) noted that it is “easy to access and does not require complex techniques.” These responses highlight badminton’s advantages in terms of safety and accessibility, making it particularly suitable for students with limited time and financial resources. Furthermore, 8 students (2.2%) selected other benefits. This affirms that badminton not only meets physical needs but also provides mental and social benefits, aligning well with the psychological characteristics and living conditions of university students.

**Figure 5. Benefits of Playing Badminton**

*Source: Survey results*

**Box 1. Benefits of Playing Badminton****Improving Cardiovascular Health**

The fast-paced nature of badminton stimulates the heart to work more vigorously. As a result, playing badminton can enhance oxygen intake and improve the efficiency of the cardiovascular system, thereby boosting heart health. Additionally, badminton helps increase endurance and promotes better blood circulation throughout the body.

**Enhancing Cognitive Function**

Numerous scientific studies have shown that playing badminton can improve cognitive function, particularly executive functioning. During gameplay, players are required to make quick decisions, maintain high levels of concentration, and recall strategic tactics. This process strengthens decision-making abilities, focus, and working memory.

**Increasing Bone Density**

Badminton is a sport that requires agile movement, rapid directional changes, and frequent jumping. These dynamic motions place mechanical stress on the bones, stimulating bone growth and enhancing skeletal strength.

A study published in the *Turkish Journal of Sport and Exercise* found that badminton players had higher bone mineral density in areas such as the thighs, upper arms, lumbar spine, and calves compared to hockey players.

**Increasing Good Cholesterol**

High-density lipoprotein (HDL) cholesterol, commonly known as good cholesterol, plays a vital role in protecting cardiovascular health. Regular participation in badminton has been shown to increase HDL levels, thereby reducing the risk of heart disease.

**Reducing the Risk of Chronic Diseases**

**Engaging in regular physical exercise plays an important role in reducing the risk of chronic diseases, particularly diabetes. According to the American Diabetes Association (ADA), just 150 minutes of structured physical activity per week can help prevent or delay the onset of type 2 diabetes.**

**Reducing Stress and Anxiety**

Playing badminton helps the body relax, release negative energy, and stimulate the production of endorphins, hormones that promote a sense of comfort and reduce stress. This sport also requires intense concentration, which helps shift attention away from worries.

**Enhancing Reflexes**

Unlike tennis, badminton does not allow the shuttlecock to bounce before being returned. The shuttlecock travels at extremely high speeds, requiring players to react instantly in order to intercept and respond. Intense rally exchanges in badminton serve as effective drills for training reflexes and developing rapid decision-making skills.

*Source: Nguyen Vy (2024)*

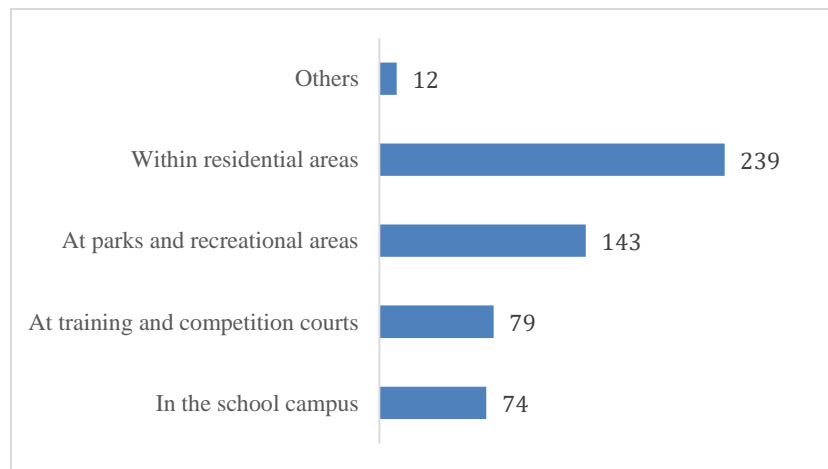
Survey results also indicate that the majority of students (**239 responses, 65.5%**) **typically play badminton within their residential areas**, such as dormitories or housing complexes-places with sufficient space to host small matches. Ranked second are parks and recreational areas, with 143 responses (39.2%), reflecting a growing trend of utilizing public spaces for practice, especially in major urban centers. Meanwhile, only 79 students (21.6%) reported playing at



training and competition courts, and 74 students (20.3%) played within the school campus. Other locations accounted for a very small proportion, below 1%.

It can thus be observed that everyday residential environments serve as the primary settings for badminton activities, reflecting the “spontaneous nature” of this movement. However, this also raises concerns about the lack of specialized training facilities for students, an issue that universities should take into consideration in the near future in order to promote more sustainable development of sports participation.

**Figure 6. Locations for Playing and Practicing Badminton**



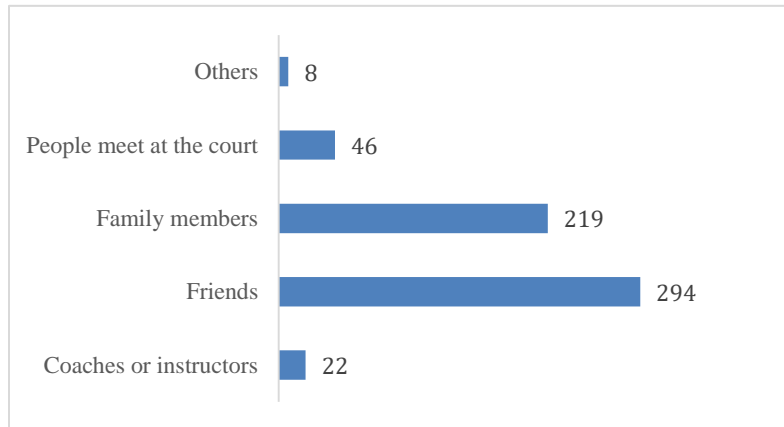
*Source: Survey results*

Regarding playing partners, ***the majority of students (294 responses, 80.5%) reported playing with friends***, followed by family members (219 responses, 60%). This highlights a key characteristic of badminton - its strong social connectivity, which facilitates bonding, interaction, and the maintenance of close relationships through sports participation.

In addition, a small proportion of students reported playing with strangers or people they randomly meet at the court (46 responses, 12.6%) and training with coaches or instructors (22 responses, 6%). Additionally, 8 students (less than 2%) selected other types of playing partners.

Overall, friendships and family relationships play a central role in maintaining students' badminton-playing habits. This indicates that social factors – particularly the spirit of companionship – strongly influence sports behavior among young people, contributing to long-term cohesion and motivation in physical training.



**Figure 7. Training Partners in Badminton Practice**

*Source: Survey results*

Badminton is a sport that offers numerous benefits and has become a popular trend pursued by many students today. However, playing it incorrectly may lead to negative health effects, or practicing in an unreasonable and unscientific way can result in adverse outcomes.

#### **Box 2. Negative effects of incorrect badminton play/training**

**Shoulder joint injuries:** The shoulder is one of the most vulnerable areas when playing badminton, as it is the most active part of the body during the game. Injuries in this area are often caused by the contraction of rotator muscles. Incorrect arm rotation techniques or improper racket grip can lead to shoulder joint injuries. Additionally, when the shuttlecock arrives, if the player raises their arm too high without proper posture preparation, the shoulder area can become strained and injured. Therefore, in the initial stages of playing badminton, it is important to practice proper arm and shoulder rotation techniques when receiving the shuttlecock to minimize shoulder joint injuries

**Wrist injuries:** The wrist can be injured during badminton due to various reasons, especially when excessive force is applied to it. When performing a swinging motion to hit the shuttlecock, players often exert significant force to hold the racket, which may lead to damage to the muscles, ligaments, and wrist bones. In addition, if players do not properly warm up and stretch before playing, sudden pressure on the wrist can result in dislocation. In such cases, players may suffer from wrist sprains or inflammation, causing pain and difficulty in movement.

**Ankle dislocation:** When running to reach the shuttlecock in distant positions, players are prone to missteps that can lead to ankle dislocation. This may cause prolonged pain, as a strong impact on the foot can force the joint between the ankle and foot out of its original position. In severe cases, intervention from orthopedic specialists may be required to realign the displaced joint. Therefore, it is important to perform proper ankle warm-up exercises to reduce the risk of this condition.

*Source: Nguyen Vy (2024)*

## 5. Discussion points

Research findings indicate that badminton is becoming one of the most popular and favored sports among university students in Hanoi. The fact that 80.9% of students know how to play badminton clearly reflects the strong spread of this sport within the academic environment. However, only around 10.4% of students play it frequently or very frequently, showing that sports practice among students still tends to be spontaneous, lacks consistency, and has yet to become a sustainable lifestyle. Therefore, the research team proposes several solutions to promote the trend of playing badminton among students in Hanoi as follows:

*Firstly, it is necessary to strengthen communication and education about the benefits of physical training in general and badminton in particular within the student community.* Universities and student organizations such as the Youth Union and Student Association can organize internal communication campaigns, seminars, or themed events like “Healthy living – effective learning” to help students better understand the role of badminton in improving physical health, reducing stress, and developing social skills. At the same time, physical education content should be integrated with life skills education to help students form a positive attitude, viewing exercise as part of a healthy lifestyle rather than a spontaneous activity.

*Secondly, universities should take into consideration the need to invest in, renovate, or expand badminton courts within the campus, dormitories, multi-purpose halls, and sports areas.* At the same time, they can collaborate with local authorities to effectively utilize public spaces such as parks, cultural centers, and ward-level gymnasiums to organize activities for students. In addition, universities should facilitate access to equipment by allowing students to borrow or rent items at low cost, and support newly established sports clubs with rackets, shuttlecocks, nets, and uniforms.

*Thirdly, student club models play a key role in maintaining and spreading sports movements within universities.* Therefore, each university should establish at least one badminton club that operates regularly, with clear regulations and a fixed activity schedule. The club’s executive board should be led by students under the professional guidance of physical education instructors or coaches. This not only promotes student initiative but also helps them develop leadership, management, and teamwork skills. Additionally, a network connecting badminton clubs across universities and colleges in Hanoi should be built to create a shared playground - a space where students can interact, learn, compete, and exchange experiences.

*Fourthly, universities can organize departmental, university-wide, or inter-university tournaments in conjunction with major occasions such as Vietnam Sports Day (March 27), Vietnamese Teachers’ Day (November 20), or the Healthy Student Week.* In addition to competitions, cultural performances, awareness campaigns, and sports exhibitions can be incorporated to enhance the appeal and attract more participants.

Fifthly, a noteworthy issue is that many students play badminton in a spontaneous manner without proper technical guidance, which increases the risk of shoulder, wrist, or ankle injuries. Therefore, *it is necessary to organize training sessions and workshops to teach basic*

*skills such as racket grip, shoulder rotation, proper warm-up, and correct movement techniques. Universities can invite professional coaches or physical education majors to provide direct instruction. Additionally, students should be encouraged to keep personal training journals to track their progress, playing frequency, and health status to help them build a planned and scientific approach to sports practice.*

## Conclusion

*Research findings indicate that badminton is currently one of the most popular and widely chosen sports among university students in Hanoi. With over 80% of students knowing how to play badminton, the sport has proven its popularity, accessibility and suitability for the living and learning conditions of students. However, the study also reveals that students' habit of playing badminton regularly remains low, mostly limited to recreational and social activities rather than intensive training.*

*Based on these findings, the research team proposes several solutions to promote badminton-playing habits among students in Hanoi, from the perspectives of universities, local authorities, and individual student participants. In future studies, the team intends to expand the scope of the survey to universities outside Hanoi to compare differences in training conditions, awareness, and sports behavior among students across regions. Additionally, more in-depth research is needed to explore the relationship between badminton playing frequency and students' physical health, mental well-being, and academic performance. Combining quantitative and qualitative methods in subsequent phases will provide a more comprehensive and practical understanding.*

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