



Development of Strategies for Enhancing Lifelong Engagement in Badminton

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Abstract

Background and Aims: Badminton is a widely popular sport across all age groups, valued for its contributions to physical fitness, health, emotional well-being, and social adjustment. It has been included in educational curricula from primary school to university. Despite many children and young people practicing basic badminton, a significant number discontinue the sport as they grow older, resulting in a decline in participation over time. According to the SPLISS model, policies and strategies should be developed to motivate individuals of all age groups to engage in their preferred sports, ensuring lifelong participation. Such engagement not only benefits individuals but also leverages their experiences to enhance overall sports development. This research aimed to develop strategies to promote lifelong engagement in badminton by encouraging interest and continuous participation. This research aimed was 1. Explore opinions on promoting and maintaining badminton at every level and age of participants. 2. To develop strategies for enhancing the lifelong engagement in badminton among children, youth, and the people.

Materials and Methods: The research instruments included a questionnaire with a validity score of 0.98 and a reliability score of 0.95. The sample consisted of 673 individuals, including athletes, parents, club and association administrators, referees, coaches, and instructors involved in badminton. Participants were selected through convenience sampling. Data from the questionnaires were analyzed by using mean and standard deviation, while opinions from focus group discussions were analyzed through content analysis.

Results: (1) The study explored opinions on the promotion and retention of badminton participation across different age groups. The findings were as follows: childhood. And youth, parents play a key role in fostering interest by encouraging basic skills and play, providing equipment, supporting competition participation, watching live matches, and engaging in sports activities together. These were highly rated motivations. Educational Institutions: schools and universities sustain engagement through structured sports programs, scholarships, and flexible academic policies, providing training and competition opportunities. Post-Graduation Support: community sports clubs should provide training, recreational plays, and career pathways in sports-related professions (e.g., coaching, refereeing) to prevent dropout. Post-Retirement from Competition: Former athletes benefit from senior competitions, coaching certification, and community sport leaders, ensuring continued involvement through recreational plays and training programs. Government and Policy Support: policies should enhance accessibility to facilities, provide grassroots development, and implement lifelong sports initiatives to sustain engagement at all levels. (2) The findings identified strategies to enhance lifelong engagement in badminton across different age groups. These included: Support from parents and families during childhood. Support from educational institutions during school enrollment. Community and sports organizations' support after graduation. Support from the community and sports organizations following retirement from athletic careers. The government's support for national sports development benefits all citizens.

Conclusion: The proposed strategies encompass tailored approaches for children, young adults, students in educational institutions, post-graduates, and retired athletes, effectively covering all age groups. These strategies were deemed effective in enhancing participation and engagement in badminton.

Keywords: Sport Development Strategies; Sport Promotions; Lifelong Engagement; Badminton

Introduction

Badminton is a widely popular sport enjoyed by people, from children to the elderly. It was a required course and elective courses in primary school through university level, and there were more than 361 badminton gymnasiums around Thailand, but 221 were congested in Bangkok and the surrounding area. (thaibadminton.com, 2024) There were badminton coaches' training courses provided by the Badminton Coaches' Club, which organized training programs every year, and some training programs organized by the Badminton Association of Thailand, the Department of Physical Education,



and the Sports Authority of Thailand. The trained coaches from those training programs organized basic badminton for children, and some trained athletes to participate in competitions. This could increase the number of badminton players gradually. But according to the Thai National Statistic Office survey, it showed that the proportion of the population who regularly exercise dropped from B.E. 2504, 2507, 2511, and 2515 from 29.1%, 29.7%, 26.1% to 23.4% respectively. (The Ministry of Tourism and Sports Thailand, 2017). In the Sixth National Sports Development Plan (2017 - 2021), it was the same trend as which research of Guthold et al (2020). surveyed on trends in insufficient physical activity across 168 countries worldwide during the period 2001–2016. And found that in 2001, the rate of insufficient physical activity in high-income countries was 31.6%, which increased to 36.8% in 2016. Meanwhile, in low-income countries, the rate increased slightly from 16% in 2001 to 16.2% in 2016. The data suggest that, from 2001 to 2016, the overall level of sufficient physical activity among the global population has shown a continuous decline, dropping to only 72.5% in 2016. But according to the survey in the EU population in 2019, the most popular way of exercising around 44 % of the practiced some physical activities at least once a week. One third of Europeans spent at least 150 minutes per week on physical activity in 2019. The across age groups on exercise participation showed that the rate of regularly participation in sport and exercise decreased from the youngsters to the elder (59%, 45%, 35%, and 22% in males, 47%, 36%, 29%, and 21% in females This showed that after school age (above 25 years old) the rate of exercise participation was decrease both in male and female. (Statista Research Department, 2022)

Thailand's sports landscape was reviewed according to six key sports development segments in the Sixth National Sports Development Plan (2017 - 2021) were: 1) development of basic exercise and sports, 2) sports for all, sports for excellence, 3) professional sports, 4) sports industry, 5) sports science and technology, and 6) effective sports management. But if we observed the distribution of sports funds, most of them were concentrated on sports for excellence and professional sports, or competitive sports in international competitions. (The Ministry of Tourism and Sports Thailand, 2017)

The achieved success in sports at the international level had several key factors for promoting sports, which had been presented through the SPLISS Model (Sports Policy factors Leading to International Sporting Success). This model outlined nine pillars that drove international sporting achievements: 1) Financial and budgetary support, 2) Effective organizational management and state sports policy, 3) Development of grassroots sports and expanding the base of athletes and stakeholders, 4) Talent identification and athlete development systems, 5) Welfare and career opportunities for athletes and sports personnel after retirement, 6) Availability of sports facilities, equipment, and training infrastructure, 7) Development of coaches and sports professionals, 8) Organization of national and international competitions, and 9) Research in sports science and innovation. Another widely accepted approach was the Long-Term Athlete Development (LTAD), which focused on cultivating sports skills across all age groups. Starting with the development of fundamental skills in childhood, LTAD aims to encourage lifelong participation in sports. For instance, Canada's "Sport for Life" initiative (2021) outlines a seven-stage framework from birth to lifelong sports engagement. Family and societal support play a critical role in fostering a child's passion for sports, which can lead to long-term success (Maharom, S., 2008; Panthong et al, 2017). Also, Tasnaina, N, et.al (2016) presented the Seven Ls' Model (7 Ls model), which includes *Look*: Parents should take their children to watch sports to spark interest. *Like*: Encourage children to play sports and teach them basic skills. *Learn*: Support children in further developing their skills through coaching. *Love*: Cultivate enthusiasm and motivation for competitive participation. *Lead*: Encourage children to leverage their achievements to obtain scholarships. *Living*: Promote sports as a sustainable career path to earn their living. *Life*: Support former athletes in transitioning into related professions, such as coaches or referees, sport organizers, and sport committees, to maintain their connection to the sports industry and use their experiences to operate sports events and activities.

Lucas Rodrigues De Brito, Fabian De Queiroz, Marcos Antonio Medeiros Do Nascimento, Rosilene Maria De Lucena Guedes, studied on the motivation in the participation of exercise for elderly were focused predominantly to promote and improve their health, to continue with physical activities, as a way to prevent and improve their pathologies, for a better quality of life, for a Successful Old Age. They concluded that all samples attributed the importance of physical activity to improve the



pathologies. Some were similar to Gavin et al (2014), who stated that factors related to the motivations for engaging in physical activity and how they varied across the lifespan were mental toughness, toned and fit, fun and friends, and stress reduction.

A prevalent motivator for participation in physical activities and sports was described as enjoyment of what they were doing, health benefits, health, fitness, and physical appearance, perceived functional independence, competition, self-care, and social involvement (Miller & Iris, 2002). (Biddle, S.J.H. and Wang, C.K.J., 2003) (Ingledeu & Markland, 2008) (Gavin et al, 2013) (Gavin et al, 2014) found in their research that Mental toughness, Toned and fit, Fun and friends, and Stress reduction were identified as contributors to exercise motivation. Students who participate in physical-sport practice are more physically active, so it is important to develop and encourage current programs to maximize their retention, stimulate self-motivation, feelings of autonomy, self-confidence, and relatedness, and work team. The most important motivators for undertaking physical activity are pleasure, mental regeneration, and maintaining health. The least important motivations to exercise are health pressure, social recognition, and the desire to belong to a group. For men, the most important motivation to engage in physical activity is the pleasure of doing it. Women engage in physical activity primarily owing to the desire to maintain an appropriate state of health. (Grajek et al, 2021) The strong and important motives for participation in physical activity were different across types of activity, demographic variables (age and gender in adults), males were more motivated than females by mastery and competition/ego, whereas females were more motivated than males by appearance and physical condition. Men showed significantly higher intrinsic motivation based on the desire to achieve mastery, whereas younger adults were motivated primarily by mastery of the activity, middle-aged adults were primarily motivated by psychological condition, and the older adults showed more concern for physical and psychological health issues in making their PA decisions. Understanding the motives that influence physical activity participation is critical for developing interventions to promote higher levels of involvement. Molanorouzi et al (2015)

Lifelong engagement in badminton is therefore vital, as it reflects love, pride, and a sense of belonging to the sport. Such engagement ensures that players remain actively involved and support badminton throughout their lives, contributing to the sustainable growth of the national sports community. Researchers had extensive experience and a network within the badminton community, taught, and regularly played badminton as a routine daily exercise for more than 40 years, and observed that some students, friends and athletes left badminton before time, so my colleague and I proposed this research, aimed to explore opinions from badminton concerned, and developed strategies for enhancing lifelong engagement in badminton. The findings of this study would lead to providing valuable strategies for people, organizations, educational institutes, and communities concerned to learn and provide the appropriate ways to keep children, adults, and the elderly participating in badminton for lifelong daily activities. And policies for badminton sports and health development.

Research Objectives

1. To explore opinions on promotion and maintaining badminton at every level and age of participants.
2. To develop strategies for enhancing the lifelong engagement in badminton among children, youth, and people.

Literature Review

Badminton enjoys significant popularity both in Thailand and globally, particularly across Asia. In Thailand, it is one of the most prominent sports, supported by grassroots initiatives, international successes, and widespread accessibility. Badminton in Thailand is widely practiced among children and the elderly. It has been incorporated as a required and elective course in educational institutions, from primary schools to universities. There are 361 badminton gymnasiums, with 221 concentrated in Bangkok (thaibadminton.com, 2024). Globally, badminton ranks as the third most-followed sport, boasting approximately 709 million fans. However, maintaining lifelong engagement in badminton differs across demographic groups and levels of athletic participation. Key contributing factors include competing academic priorities, limited access to advanced training facilities, time constraints due to

work and family commitments, injuries, burnout, financial instability, intense performance pressure, and uncertainties following retirement. (The Badminton World Federation, 2024).

Keawprasit (2021) identified factors influencing the development of badminton in Thailand, focusing on: 1. Developmental Factors: Management systems, budgets, public relations, and training facilities. 2. Athlete Development: Physical fitness, career success, professional respect, and the influence of badminton idols.

Badminton is integrated into educational curricula across all levels, enabling Thai students to practice and play the sport. Organizations such as the Badminton Coaches' Club, the Badminton Association of Thailand (BAT), and the Physical Education Department offer training courses for teachers and athletes to enhance their skills. As a result, numerous badminton coaches conduct training sessions nationwide, with the number of players in competitions—especially during summer holidays—significantly increasing (Thai Badminton Web board, 2024). A survey of the EU population in 2019 highlighted exercise trends, with 44% engaging in physical activities at least once a week. About one-third of Europeans spend at least 150 minutes per week on physical activities. However, participation rates decrease with age, showing a decline from younger to older age groups. In males, participation rates were 59%, 45%, 35%, and 22%, while in females, the rates were 47%, 36%, 29%, and 21%, respectively. After school age (above 25 years), the rate of exercise participation declined in both genders (Statista Research Department, 2022)

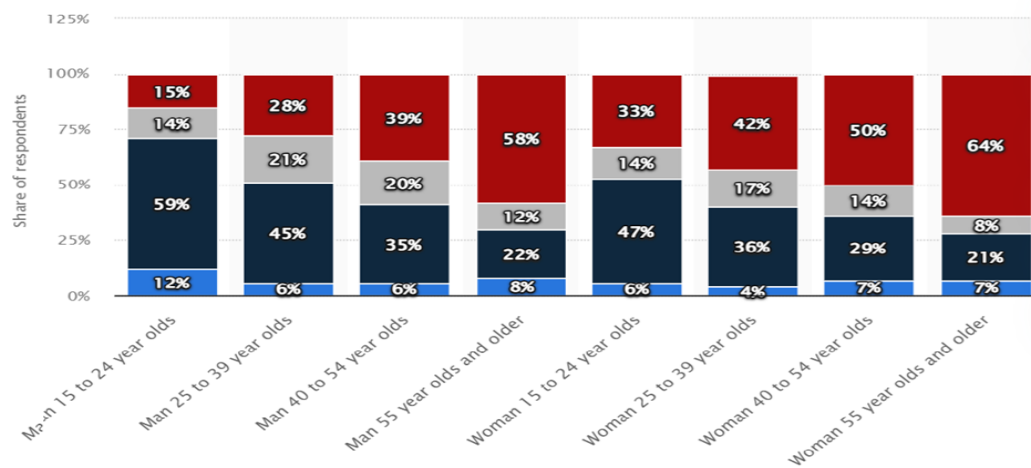


Figure 1 The percentages of participation in exercise (Statista Research Department, 2022)

Sports Policy Factors Leading to International Sporting Success (SPLISS): This framework consists of nine pillars crucial for enhancing elite sports systems:

1. Financial Support: Adequate and efficient funding allocation for elite sports programs.
2. Structure and Organization of Sports Policies: Effective governance and management of sports policies.
3. Sports Participation: Grassroots involvement and widespread participation to nurture talent.
4. Talent Identification and Development: Systems to identify and develop athletic potential.
5. Athlete and Post-Career Support: Comprehensive career transition planning for athletes.
6. Training Facilities: Availability and quality of infrastructure for training and competition.
7. Coaching Provision and Development: Access to professional coaching programs.
8. International Competition: Opportunities for high-level competitive experiences.

The Long Term Athletes Development: Use of technology and innovation to boost athlete performance (De Bosscher et al, 2009).

Long-Term Athlete Development (LTAD): A structured framework for optimizing athlete growth and engagement. Key stages include:

1. Active Start: Basic movement skills for children aged 0-6.
2. Fundamentals: Sport-specific skills for ages 6-9 (girls) and 6-12 (boys).
3. Learning to Train: Physical literacy and sports skills for ages 8-11 (girls) and 9-12 (boys).



4. Training to Train: Endurance and sport-specific skills for adolescents.
5. Training to Compete: Skill refinement for high-level competition.
6. Training to Win: Peak performance in elite competitions.
7. Active for Life: Encourages lifelong physical activity.

The Seven Ls Model Tasnaina, N., et al. (2016): This model outlines strategies for lifelong sports engagement:

1. Look: Parents expose children to sports to spark interest.
2. Like: Encourage basic sports participation.
3. Learn: Develop skills through structured coaching.
4. Love: Foster enthusiasm for competitive participation.
5. Lead: Leverage achievements for scholarships or careers.
6. Living: Promote sustainable careers in sports.
7. Life: Support post-athlete career transitions in related fields.

Sports Development in Thailand: Thailand's "The National Sport Development Plan" and now are on 7th Plan (2023-2027)." is currently in its 7th iteration (2023–2027). This plan emphasized competitiveness, supports national and international events, and integrates local identity through sports tourism. Its four stages were Foundation, Participation, Performance, and Excellence—align with the SPLISS, LTAD, and Seven Ls models.

The 6th National Sports Development Plan (Ministry of Tourism and Sports Thailand, 2017) promotes basic exercise and sports education.

1. Increasing accessibility for all citizens.
2. Advancing sports for excellence.
3. Supporting sports industries for economic value.
4. Developing sports knowledge and innovation.
5. Enhancing sports management.

Summary of Literature Review: Promoting sports performance and lifelong participation requires cooperation among families, schools, communities, sports clubs, associations, and national organizations. By driving events and activities, opportunities for training, competition, and sustained participation can increase, reducing dropouts and ensuring engagement across all ages. The SPLISS, LTAD, and Seven Ls models provide valuable frameworks for achieving these goals among Thai citizens.

Concept Framework

Independents

Variables

1. Sport Policy factors Leading to International Sporting Success (SPLISS Model)
2. Long-Term Athlete Development (LTAD Model)
3. 7 Ls' Model of Sport Development
4. Physical Activity Motivation Theories and Practice.
5. National Sport Development Plan
6. Surveying the selected key factors from experts and persons who had regularly participation in badminton.



Dependents Variables

Strategies for Enhancing Lifelong Engagement in Badminton

1. Strategies for promotion and support during childhood
2. Strategies for promotion and supports during enrolment in educational institutes
3. Strategies for supports after graduation.
4. Strategies for promotion and supports after retirement from athletes.
5. Strategies for government supports in sports development.

Figure 1 Concept Framework

Methodology

This study employed a mixed-methods research approach, with the following procedures:

Population and Sample: The population included athletes, parents of athletes, administrators of sports clubs and associations, referees, coaches/sports teachers, and participants in badminton. As the population size was unknown, the sample size was calculated using Cochran's formula (Cochran, W.G. (1953) at a 95% confidence level and a margin of error of $\pm 5\%$, resulting in a required sample size of 385 participants. But these samples in the research were 673 people who were sampled by a convenience technique.

Data Collection Tools: The questionnaire consisted of three sections: General information about the respondents, opinions on activities promoting lifelong engagement, and suggestions. A 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Research instrument quality: Before data collection, the questionnaire underwent content validity testing, and the Index of Item-Objective Congruence (IOC) was calculated, yielding a validity score of 0.98. Reliability testing was conducted with a pilot group of 30 participants, resulting in a reliability score of 0.95.

Data Collection: The questionnaires were distributed during March – October 2024 to the samples at badminton courts and badminton competition halls, and online via the researcher's connections with coaches, referees, parents, and badminton players across Thailand. A total of 673 complete questionnaires were collected and verified.

Data Analysis: The data were analyzed using descriptive statistics, including frequency, percentage, mean, and standard deviation. The findings from the questionnaires and document review were summarized to develop strategies for enhancing lifelong engagement in badminton.

Ethical Considerations: This study was approved by the Human Research Ethics Committee of Kasetsart University under approval number KUREC-CSC65/024, dated October 17, 2022. The objectives and confidentiality of personal information were clearly explained to all participants.

Research Results

The study analyzed data from the sample group and presented the findings as follows:

1: General Information of Respondents

The characteristics of questionnaire respondents were male (60.90%) and female (39.10%). Aged 20–25 years (42.50%), 26–30 years (46.80%), 46–50 years (10.00%), 36–40 years (7.60%), and 41–45 years (7.60%). Currently, 71.20% play badminton for health, 13.20% are still active athletes in competitions, and 12.60% were former athletes who played for health.

2: Opinions of Respondents from the questionnaire

2.1 Parents' care and support

Opinions on the role of parents in encouraging and supporting their children to participate in sport and exercise with enjoyment, interest, and skill development in badminton from childhood through school age. The findings could be summarized as follows:

2.1.1. Motivating Initial Interest (Active Start) Overall, respondents rated this aspect highly. The top three factors with the highest scores were: Encouraging children to play sports and exercise with friends (4.21 ± 0.77). Parents engaging in regular sports and exercise activities with their children (4.28 ± 0.84). Parents attending sports activities and games with their children (4.27 ± 0.83).

2.1.2. Providing equipment and supporting badminton training. Overall, respondents rated this aspect at a moderate level. However, one item was rated high on: parents providing basic sports equipment and dress (4.26 ± 0.80).

2.1.3 Promoting competition participation. Overall, respondents rated high (4.11 ± 0.89). The top-rated items were: Encouraging and supporting participation in competitions (4.17 ± 0.84). Creating a competition portfolio and participating in sports activities for future academic or financial opportunities (4.12 ± 0.96). Registering children as provincial, club, or association athletes to qualify for competitions (4.03 ± 0.86).

2.2 Promotion during enrollment in educational institutes

In terms of promotion and support during the time spent in educational institutions, respondents indicated that the roles and responsibilities of the educational institution should be categorized as follows:

2.2.1 Promotion of sports activities and support to be athletes: The respondents expressed the highest level of agreement (4.34 ± 0.780). When considering the individual points, it was found that respondents strongly agreed with every aspect.

2.2.2 Facilitation in education, scholarships, honorary awards, and income generation during studies: Institutions should manage academic schedules to facilitate training and competitions, with a mean score of 4.37 ± 0.78 . Respondents agreed that institutions should support and promote scholarships and honorary awards for sports, with a mean score of 4.34 ± 0.76 . There was strong agreement that institutions should promote opportunities for athletes to earn income during their studies, with a mean score of 4.30 ± 0.830 .

2.2.3. Implementation of sports systems in educational institutions: Respondents expressed high agreement on the effectiveness of sports systems in institutions, with a mean score of 4.28 ± 0.79 .

2.3 Promotion and Support After Graduation

The respondents expressed strong opinions regarding the roles and responsibilities of relevant organizations in promoting employment and income opportunities after graduation. The overall mean score for this area was 4.27 ± 0.77 . When analyzing specific aspects, respondents agreed strongly on all points

2.4 Promotion and support after athletes' retirement.

The respondents expressed strong opinions on the promotion and support after athletes retire, focusing on the following areas:

2.4.1 The respondents expressed overall strong agreement on the support of their earnings (4.31 ± 0.75). When examining specific areas, it was found that the respondents strongly agreed on every point.

2.4.2 The respondents expressed overall strong agreement on the upskilling of knowledge and skills for continued contribution to sports tasks. The respondents expressed strong agreement (4.29 ± 0.77). Specific points were also strongly agreed upon by the respondents.

2.4.3 Organizing Activities to Maintain Health and Athletic Performance, The respondents expressed strong agreement (4.27 ± 0.77). Every aspect was strongly supported by the respondents.



2.5 The government supports sports development for all people

The respondents expressed overall strong agreement (4.23 ± 0.83) regarding government initiatives on:
2.5.1 Motivate parents to support the sport and exercise participation of their children (4.18 ± 0.85)

2.5.2 Provide sports opportunities for athletes on the talent reserve hero fund and education fee. (4.25 ± 0.89)

2.5.3 Provide sports success as a key success in the quality assurance system (4.27 ± 0.82)

Table 1 Frequency, Percentage, Mean, and Standard Deviation of Opinions Categorized by the developmental periods of participants in badminton

No.	List	Percentage of opinion level					\bar{x}	S.D.
		Least	Low	Moderate	High	Highest		
1. Parents' care and support during childhood								
1.1	Parents encourage and motivate their children to participate in sports and exercise activities.	0.10	7.25	17.10	35.58	43.23	4.17	0.55
1.2	Parents provide sports equipment and encourage sports training.	0.44	18.21	21.39	37.30	34.90	3.40	0.92
1.3	Parents encourage participation in sports competitions.	0.13	6.87	16.27	35.20	41.40	4.11	0.89
2 Promotion during enrollment in educational institutes								
2.1.	Educational Institutes Facilitation Education and Sport Training	0.08	1.94	12.30	34.90	44.68	4.34	0.71
2.2.	Educational institutions should provide scholarships and opportunities for athletes to earn income	0.23	1.97	13.10	35.63	49.10	4.34	0.79
2.3	The institution provided opportunities for athletes to pursue their education.	0.17	1.97	13.83	37.70	46.20	4.28	0.79
3. Promotion and Support After Graduation								
3.1	Support the employment and earnings after graduation	0.10	1.15	14.73	39.08	37.38	4.27	0.77
3.2	Support a career in teaching sports in schools, becoming a referee, coach, or sports event organizer.	0.10	1.30	15.00	39.20	44.3	4.26	0.78
3.3	Promote more sports competitions and create events with various skill levels, so that everyone can participate in activities according to their abilities and interests.	0.10	1.00	12.80	40.90	15.20	4.30	0.74
4. Promotion and support after athletes' retirement.								



No.	List	Percentage of opinion level					\bar{x}	S.D.
		Least	Low	Moderate	High	Highest		
4.1	Providing career and support income for living	0.03	0.93	13.97	37.80	47.27	4.31	0.75
4.2.	Promote and support the upskilling of sports knowledge and skills, and honor the pride and image of being an athlete.	0.15	1.30	48.38	38.10	46.25	4.29	0.77
4.3	Organize sports activities to maintain athletic status and promote health	0.03	1.20	15.33	38.20	45.17	4.27	0.77
5. The government support for sport development for all people								
1	Motivate parents to support the sport and exercise participation of their children.	0.10	3.00	19.30	33.90	43.70	4.18	0.85
2	Provide sports opportunities for athletes on the talent reserve hero fund and education fee.	0.10	2.70	14.30	37.40	45.50	4.25	0.89
3	Provide sports success as a key success in the quality assurance system	0.10	2.80	14.40	34.80	47.60	4.27	0.822

Guideline to development strategies for enhancing lifelong engagement in Badminton

1. Parents and family support during childhood.

1.1. Creating Motivation in the Early Stages (Active Start): Parents should encourage the following:

1.1.1 Motivate and provide opportunities for children to play sports and exercise with friends.

1.1.2 Take children to watch sports or attend sporting events at sports venues.

1.1.3 Encourage children to watch and learn about sports through TV shows or sports-related videos.

1.1.4 Support the necessary sports equipment and quality sportswear to support their involvement in sports.

1.1.5 Find a coach to train skills and tactics in badminton for health and competition.

1.1.6 Encourage participation in competitions.

1.1.7 Create a portfolio of competition results and sports activities to help with school.

Submit admissions or scholarship applications and register as an athlete for competitions.

2. Educational institutions support during enrollment

2.1 Establishment of sports organizations in educational institutions:

2.1.1 Establish sports clubs to operate the training and competition teams.

2.1.2 Collaborate with sports clubs and associations on joint projects.

2.1.3 Establish networks among schools' and universities' sports clubs to support students and athletes in organizing sports activities and events.

2.2 Institutional Policies to Support Student-Athletes:

2.2.1 Provide finance to support students' education, training, and competing while studying.

2.2.2 Provide scholarships, rewards, and other incentives to support athletes' income during their studies.

2.2.3 Provide sports activities as extracurricular activities

2.2.4 Ensure academic flexibility to accommodate sports training and competition schedules.



2.2.5 Offer sports-related degree programs like physical education, sports management, or the sports industry, catering to aspiring athletes.

2.2.6 Implement a sport hero scholarship program with multiple levels (A, B, C, D, E) for athletes based on performance and potential.

3. Community and sport organization support after graduation

3.1 Support for career and earnings for living:

3.1.1 Encourage the organizations to organize more sports competitions at various skill levels to expand participation.

3.1.2 Support opportunities for full-time careers or part-time tasks for athletes.

3.1.3 Support the athletes and retired athletes to be coaches, referees, or organizers of sports events.

4. Government and private enterprise support after retirement for athletes

4.1 Career and income opportunities:

4.1.1 Support athletes to work as coaches, referees, or trainers after their retirement.

4.1.2 Encourage both public and private sectors to employ retired athletes.

4.1.3 Support athletes to be sport personnel as coaches, referees, or sports staff

4.2 Transition to sport-related careers:

4.2.1 Support retired athletes in upskills, further knowledge, and skills in the sports industry.

4.2.2 Government sports bodies should set up senior athlete associations for networking and mutual support.

4.2.3 Provide opportunities for retired athletes to become upskilled to be certified coaches or referees.

4.2.4 Collaborate with schools and universities to recognize retired athletes as community sports leaders, coaches, or consultants

4.2.5 Regularly organize senior badminton competitions based on age and skill levels to retain physical fitness, health, pride, and community involvement for them.

5. Government support in sports development for all people

5.1 Expanding Sports Education: Create programs for people interested in sports, ensuring pathways for exceptional talent to pursue higher education.

5.2 Tax Incentives: Consider offering tax reductions for parents who support their children in sports training and competitions.

5.3 Establish a sports hero fund for reserve talents in various divisions at each level and age group of athletes.

5.4 Set sport policies that cover sport development for children through the elderly's engagement.

6. The confirmation of appropriateness and practicality

The focus group discussion among nine experts consisted of badminton coaches, teachers, administrators, parents, athletes, students, and sports organization staff; they mostly agreed on the developed strategies as appropriate and practical. It could propose to implement in badminton concerned person organization educational institutes, especially on parents' and family's engagement supporting in childhood, and government and private enterprise support in athletes after graduation, and after athletes' retirement.

Discussion

During childhood, parents play a crucial role in instilling and fostering a love for sports in their children. Research studies and academic articles support the idea that parents should initiate motivation by engaging in sports activities with their children, such as taking them to watch sports events and regularly playing sports together. For example, concepts from the University of Pennsylvania (2000) and the Long-Term Athlete Development Model (LTAD) in Canada (Athletics.ca, 2024) highlight that children should develop fundamental skills at an early age to cultivate enjoyment and sustained interest in sports.

The findings of this study align with the concepts proposed by Tasnaina, N., & Tasnaina, O. (2022) and Panthong et al (2017). which suggests that the development of sports from an early age should consider the application of the SPLISS Model to promote and establish a strong foundation for athletes. This approach requires support from the government and educational institutions in terms of budget allocation, training facilities, and sports equipment. Additionally, structured athlete support systems and programs such as the "Sport Hero" initiative should be implemented to generate

widespread interest in sports and expand career opportunities for athletes. Furthermore, the 7 Ls Model (Tasnaina, N. 2016) aligned with these strategies for fostering long-term engagement in sports, LOOK: Parents should take their children to watch sports to spark interest, LIKE: Encourage children to play sports and teach them basic skills, LEARN: Support children in further developing their skills through coaching, LOVE: Cultivate enthusiasm and motivation for competitive participation, LEAD: Encourage children to leverage their achievements to obtain scholarships, LIFE: Promote sports as a sustainable career path, LIVING: Support former athletes in transitioning into related professions, such as coaches or referees, to maintain their connection to the sports industry. In conclusion, fostering long-term engagement in badminton requires parental support from an early age, complemented by continued reinforcement from educational institutions and the community. This collective effort creates an environment conducive to both physical development and career opportunities in sports.

Research Recommendations:

For the application of these research results

1. This research results concerned many levels of organizations, from the family to the national level. The Ministry of Tourism and Sports Thailand should take into consideration initiating the concepts of the operations.
2. The organization concerned with badminton should consider the operation in its scope to provide training, competition, and other supports to gain more participants and their performance to keep them participating in badminton for lifelong activities

For Future Research

1. Further studies should explore the factors influencing sports dropout in adulthood to develop strategies that support sustained participation and long-term engagement in badminton.
2. Research should examine regional variations in training methods and support systems to create models tailored to the unique environmental and cultural contexts of different communities.

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