



Model development based on small-sided games for the national football development program in Malaysia

Desarrollo de un modelo basado en juegos reducidos para el programa nacional de desarrollo del fútbol en Malasia

Authors

Zulakbal Abd Karim ¹
 Thariq Khan Azizuddin Khan ¹
 Norhazira Abdul Rahim ¹
 Muhammad Muqri Aiman, ¹
 Rajkumar Krishnan Vasanthi ²
 Ali Nadzalan ¹
 Amin Akbar ³

¹ Universiti Pendidikan Sultan Idris (Malaysia)

² INTI International University (Malaysia)

³ Universitas Negeri Padang (Indonesia)

Corresponding author:
 Zulakbal Abd karim
zulakbal@fsskj.upsi.edu.my

How to cite in APA

Karim, Z. A., Khan, T. K. A., Rahim, N. A., Aiman, M. M., Vasanthi, R. K., Nadzalan, A., & Akbar, A. (2025). Model development based on small-sided games for the national football development program in Malaysia. *Retos*, 63, 705–718. <https://doi.org/10.47197/retos.v63.111432>

Abstract

Introduction: The National Football Development Programme (NFDP) in Malaysia is a comprehensive initiative designed to improve the quality of football through structured coaching and player development, particularly focusing on youth engagement.

Objective: This study aims to develop a coaching model rooted in Small-Sided Games (SSGs) that is specifically designed for the cultural and social context of Malaysia.

Methodology: This study used Qualitative Research Methodology, specifically utilizing the Evolved Grounded Theory approach by Strauss and Corbin. Data were collected (n=14) NFDP coaches in each state in Malaysia using in-depth semi-structured open-ended interviews. Interviews were recorded, transcribed, observed and document analyzed exactly as they were spoken using Atlas.ti 8.0 software.

Results: The findings of this study indicate that coaching presents four steps of small-sided games implementation in the National Football Development Programme namely Implementation, Improvement, Re-implementation and Modification.

Conclusions: This model will contribute information for youth football player development in Malaysia. Therefore, this finding will assist stakeholders and NFDP coaches in specific areas that can be improved for youth football player development in Malaysia.

Keywords

Evolve Grounded Theory, NFDP Coach, Model Development, Small-Sided Games, Qualitative.

Resumen

Introducción: El Programa Nacional de Desarrollo del Fútbol (NFDP) en Malasia es una iniciativa integral diseñada para mejorar la calidad del fútbol a través de un entrenamiento estructurado y el desarrollo de los jugadores, centrándose especialmente en la participación de los jóvenes.

Objetivo: Este estudio tiene como objetivo desarrollar un modelo de entrenamiento basado en los juegos reducidos (SSG) que esté diseñado específicamente para el contexto cultural y social de Malasia.

Metodología: Este estudio utilizó una metodología de investigación cualitativa, utilizando específicamente el enfoque de la teoría fundamentada evolucionada de Strauss y Corbin. Los datos se recopilaron (n = 14) de los entrenadores del NFDP en cada estado de Malasia mediante entrevistas abiertas semiestructuradas en profundidad. Las entrevistas se grabaron, transcribieron, observaron y analizaron los documentos exactamente como se dijeron utilizando el software Atlas.ti 8.0.

Resultados: Los hallazgos de este estudio indican que el entrenamiento presenta cuatro pasos de implementación de juegos reducidos en el Programa Nacional de Desarrollo del Fútbol, a saber, implementación, mejora, reimplementación y modificación.

Conclusión: Este modelo aportará información para el desarrollo de jugadores de fútbol juvenil en Malasia. Por lo tanto, este hallazgo ayudará a las partes interesadas y a los entrenadores del NFDP en áreas específicas que se pueden mejorar para el desarrollo de jugadores de fútbol juvenil en Malasia.

Palabras clave

Evolución de la teoría fundamentada, Entrenador NFDP, Desarrollo de modelos, Juegos reducidos, Cualitativo,

Introduction

Football, universally acclaimed as the world's most beloved sport, exerts a profound influence on communities around the globe. It not only fosters passionate devotion but also contributes significantly to economic growth and local development (Kurniawan et al., 2024; Karim & Razak, 2018; Knott & Tinaz, 2022). In Malaysia, football stands at the pinnacle of national sporting interests, with facilities readily available in every district, underscoring its widespread appeal and integral role in Malaysian culture (Zulakbal & Ali, 2017). Recognizing football's immense potential to boost national prosperity and drive community development, the Malaysian government has invested in several comprehensive initiatives. Among these is the National Football Development Program (NFDP), a strategic effort designed to enhance Malaysian football on an international level (Hung, 2021; Bradbury et al., 2022). The NFDP focuses on grassroots development, coaching improvement, and the creation of a structured competition framework, all aimed at cultivating young talent and elevating the standard of football nationwide (National Football Development Program, 2021).

Despite significant financial investments and years of preparation, the program has yet to produce the desired outcomes. One key issue is the training module used by PPBN, which may not be effectively developing players' skills to meet international standards. A promising approach to address this issue is the incorporation of Small-Sided Games (SSGs) into the training modules. SSGs, which involve smaller playing areas and fewer players, have been shown to improve technical skills, decision-making, and overall physical fitness in a more game-like environment. This method allows players to engage more frequently with the ball, enhancing their tactical awareness and teamwork, which are crucial for success on the field. Studies from recent years support the effectiveness of SSGs in fostering a more holistic and realistic training environment, which could better align with the PPBN's objectives (Timmerman, Savelsbergh, & Farrow, 2019; Ormetto et al., 2018; Sialis, 2023). Given these potential benefits, it may be beneficial for the PPBN to integrate SSGs more extensively into their training programs. This shift could help in creating a more dynamic and effective development process, ultimately leading to better outcomes in international competitions.

In this context, small-sided games (SSGs) have emerged as a promising training methodology. SSGs are designed to simulate real-game scenarios, allowing players to hone their technical skills, tactical understanding, and decision-making abilities in a more engaging and game-like setting (Klingner et al., 2021; Clemente & Sarmiento, 2020). However, the impact of SSGs can vary significantly depending on factors such as the players' age, their fitness levels, and the specific design of the games (Clemente et al., 2023; Petiot et al., 2023). Despite the versatility and adaptability of SSGs, there remains a need for more detailed research to fully understand their effectiveness, particularly within the unique cultural and sporting context of Malaysia.

To wrap up the introduction, this research aims to develop a coaching model rooted in Small-Sided Games (SSGs) that is tailored specifically to the cultural and social context of Malaysia, using the Evolved Grounded Theory approach. By grounding the model in the realities of Malaysian football culture, the approach not only addresses the technical and tactical aspects of the game but also resonates with the cultural and social context in which the players are being developed (Giles et al., 2022; Kennedy & Wight, 2021). This culturally-sensitive model is expected to enhance the effectiveness of SSGs in fostering player development, leading to better outcomes for the PPBN. By focusing on the unique aspects of Malaysian football culture, the model seeks to provide a framework that is not only technically sound but also culturally relevant, enhancing the effectiveness of the National Football Development Program (PPBN). This approach is critical in ensuring that the training methods resonate with local practices, values, and traditions, thereby fostering a deeper connection between coaches and players. The model is designed to address the specific needs and challenges faced by Malaysian coaches, ensuring that the training programs are both practical and impactful. By integrating theoretical insights with real-world applications, this research aims to contribute significantly to the development of football in Malaysia, supporting the PPBN's goals of producing players who can compete successfully on the international stage (Ahmad et al., 2021; Moghaddam & Mustapha, 2022). Through this culturally informed approach, the study not only aims to improve coaching practices but also to strengthen the overall football development framework in Malaysia.

An unclear number of study has been reported thus far been conducted to produce a football training model based on SSG that can help guide PPBN coaches. The irony is that SSG is an actual training application, but in small games that involve manipulating the size of the playing area and smaller players (Timmerman, Savelsbergh & Farrow, 2019), according to Timmerman et al. (2019) again, SSG can improve technical skills, decision-making skills, and physical skills. The football training model includes four main moment aspects to help the program produce the desired DNA. The use of SSG as one of the components of training is a very suitable training pattern to carry out because it combines all aspects of fitness, Technique, and tactics, which are very necessary for a team (Ormetto et al., 2018).

Method

In this study, a qualitative research method was employed, specifically using the Evolved Grounded Theory approach as developed by Strauss and Corbin (1998). This method was selected to construct a coaching model based on Small-Sided Games (SSGs) that aligns with the unique cultural context of Malaysia's National Football Development Program (NFDP). Grounded Theory was chosen for its ability to generate a theory that is grounded in the data collected from participants, allowing for the development of a model that is both relevant and practical. The research process involved iterative cycles of data collection and analysis, where interviews with NFDP coaches were conducted and systematically coded to identify emerging patterns and themes. These codes were then refined through open, axial, and selective coding processes to build a coherent and comprehensive model. The Evolved Grounded Theory approach, as outlined by Strauss and Corbin, emphasizes the importance of constant comparison and theoretical sampling, which ensures that the emerging theory is well-grounded in the realities of the field (Strauss & Corbin, 1998; Charmaz, 2021).

Participants

In this research, the purposive sampling method was strategically employed to select participants who would provide the most relevant and insightful contributions to the study. This method is particularly suited for qualitative research, where the depth and quality of information are prioritized over sheer quantity. Participants had to meet two key requirements, they must have substantial experience in coaching within the national football development programs and hold a valid coaching license. As a result of this targeted approach, 14 coaches, representing each state participating in the National Football Development Program (NFDP) in Malaysia, were chosen. These individuals were not just randomly picked; they were specifically identified for their ability to provide valuable perspectives and first-hand experiences that would enhance the depth and relevance of the research findings. This careful selection process underscores the importance of aligning the expertise of participants with the study's goals, ensuring that the research is both meaningful and impact (MuliSa, 2022).

Table 1.

STATE	LICENSE	EXPERIENCE	PARTICIPANT
KEDAH	D License	3 Years	1
PERAK	C License	5 Years +	1
SABAH	C License	5 Years +	1
JOHOR	C License	4 Years	1
PULAU PINANG	B License	5 Years +	1
SARAWAK	B License	5 Years +	1
KELANTAN	B License	5 Years +	1
NEGERI SEMBILAN	B License	5 Years +	1
SELANGOR	B License	3 Years	1
KUALA LUMPUR	B License	5 Years +	1
TERENGGAN	B License	5 Years +	1
PAHANG	B License	5 Years +	1
MELAKA	B License	5 Years +	1
PERLIS	A License	5 Years +	1
TOTAL			N=14

Procedure

By adhering to these procedures, the research aims to produce results that are both trustworthy and highly relevant to the specific context of the study. Before data collection commenced, the researchers



sought approval applied for ethical clearance from the Research Ethics Committee at the UPSI Management and Innovation Center (RMIC). Upon fulfilling all administrative requirements and obtaining the necessary certification for ethical compliance, the researchers proceeded to the next phase. The researcher-initiated contact with potential participants by sending them an official permission letter from Sultan Idris Education University, inviting them to participate in the study. After receiving their consent, the researcher coordinated with the participants to schedule interview sessions at a time and place of their choosing, ensuring that the process was comfortable and free from any pressure. Before the interviews began, participants were thoroughly informed about the research's aims and objectives, minimizing any potential risks or misunderstandings later on.

Instrument

Based on Patton (2020), the research was designed with a rigorous approach to ensure the reliability and validity of the instruments used. To achieve this, the researchers enlisted the expertise of four specialists who critically evaluated the draft questions. These specialists were selected for their deep knowledge and experience in the field, ensuring that their feedback would be both relevant and valuable. The evaluation process was meticulous, focusing on the clarity, relevance, and appropriateness of each question in relation to the study's objectives. After the specialists provided their feedback, the validity of the questions was assessed using the Cohen's Kappa index, a statistical measure used to evaluate the level of agreement between the evaluators. In this study, the Kappa value exceeded 0.80, indicating a high level of agreement among the specialists. This high Kappa value is significant because it reflects the robustness and reliability of the research instruments, meaning that the questions were well-designed and capable of producing consistent and meaningful results. By ensuring that the instruments were both valid and reliable, the researchers laid a strong foundation for the study, increasing the confidence in the findings and their potential impact.

Interview

The interview component of this research, we employed in-depth, semi-structured interviews. This approach involved asking open-ended questions that were carefully crafted in advance, allowing for detailed and expansive responses (Grodal et al., 2021). Such interviews not only guide the conversation but also provide room for participants to develop and expand their answers (Knott et al., 2022). During these in-depth, semi-structured interviews, the interviewer sought to gather comprehensive information from each participant. The sessions were conducted with the principle of data saturation in mind, meaning the number of interviews was not predetermined but rather guided by the point at which no new information emerged from the participants. Once data saturation was achieved, the interviews were concluded, ensuring that the collected data was rich and complete. In total, the interview sessions spanned approximately 770 minutes, or about 13 hours and 23 minutes, across coaches from each state involved in the National Football Development Program (NFDPP). Each interview lasted between 45 and 75 minutes, allowing for thorough exploration of the topics at hand. The researcher also provided examples of key questions that elicited valuable insights, contributing significantly to develop model based on small-sided games.

Document Analysis

Document analysis played a crucial role in gathering information and data from coaches to inform the development of a model based on small-sided games. This process involved collecting various documents that not only supplemented evidence from other sources but also helped confirm emerging research questions and create new categories for analysis. Throughout the research, the researchers meticulously gathered documents that supported the study's focus on player development. Among these were training programs provided by each coach, as well as reference books used by players to enhance their knowledge of football. These documents included detailed methods for training through small-sided games, offering valuable insights into effective practices within the sport. The analysis of these documents revealed consistent arguments from sports academies that aligned with the goals of football academies and mirrored the perspectives of the coaches involved. This alignment further validated the research findings, highlighting the importance of integrating document analysis with other qualitative methods to build a comprehensive understanding of the subject matter.

Observation

Apart from obtaining the primary data from the interview results described above, researchers also carried out field observations. In qualitative research, observation is a data collection technique where the researcher makes field notes about the behavior and activities of individuals at the research site



(Creswell, 2014). In our study, we combined observation with interviews. Researchers observed the activities at football academies in Malaysia while conducting interviews with the coaches. The observations, carried out during the exercise and training sessions, provided a comprehensive view of the research site and confirmed the interview results.

Data analysis

In this grounded theory research, interviews were the primary tool for gathering data, forming the foundation of this qualitative study. The analysis process was systematic, involving open coding, axial coding, and selective coding to identify and refine emerging themes and patterns. As noted by Miles, Huberman, and Saldaña (2020), analyzing qualitative data requires a careful process of selecting, abstracting, and interpreting raw information to derive meaningful insights. The study focused on fourteen U-17 soccer coaches participating in a development program in Malaysia. The researchers meticulously analysis 215 pages of interview transcripts, examining the text word by word, line by line, and sentence by sentence. This detailed approach allowed for a deep and nuanced understanding of the data, capturing the richness of the participants' experiences and perspectives. This process contributed to the development of a grounded theory that accurately reflects the realities of coaching within the National Football Development Program (Charmaz, 2021).

Open coding was the first step in the process, where the data was broken down into discrete parts to identify initial concepts and categories. In this study, open coding revealed key themes from the coaches' interviews, implementing, improvement, reimplementation and modification of small-sided games and the need for more comprehensive guidelines. Axial coding followed, where the identified categories were further refined and linked based on their relationships. For instance, axial coding researchers create a new word to represent the open coding sentence. After create a new wording to represent open coding, it helps to filter what are the most rapidly and important method use from coaches based on small-sided games training.

Finally, selective coding involved integrating and refining these categories to form a coherent theory. Through selective coding, key themes such as the necessity of clear guidelines for small-sided games, the implementation based on four aspect which are numbers of players, field size, laws of the game and duration insufficient training information were identified. Then, the next key themes found in selective coding were improvement based on four aspects involve technical, tactical, physical and psychology of players in when applying small-sided games training. The others key themes were reimplementation after the step of improvement been observes. Coaches try to reimplement what were the gap needed to be improved to make sure the format of small-sided games in numbers of players, field size, laws of the game and duration to make the training more efficient. The last key themes found were modification. Modification must be doing if players can't to follow or adapt the method of small-sided game doing by coach. These themes, derived from a rigorous analysis process, offer valuable insights into the model development based on small-sided games as a guideline for improvement to enhance coaching effectiveness and player development (Bryant & Charmaz, 2020).

Results

The researchers dedicated over eight months to meticulously completing this research process, which encompassed several critical stages. It began with the careful preparation of interview questions, followed by conducting the interviews, transcribing the data, and engaging in thorough data analysis. This analysis was repeated multiple times to uncover themes that would illuminate the model development based on small-sided games for the National Football Development Program. The researchers provided a detailed explanation of the data collection process, offering insights into the steps taken and how they contributed to the research findings. This systematic and iterative approach ensured that the final model was grounded in robust and carefully analysed data, reflecting the realities and needs of the development program.

Field Size of Small Sided Games

The study on small-sided games specifically examined how varying the size of the playing field impacts the technical actions performed by players. The research involved professional football players under



the national football development program, who participated in game formats ranging from 1 vs 1 to 5 vs 5 on systematically adjusted pitch sizes. For each format, different dimensions were used: 1 v 1 on pitches of 5x10 m, 10x15 m, and 15x20 m; 2 v 2 on pitches of 10x15 m, 15x20 m, and 20x25 m; 3 vs 3 on pitches of 15x20 m, 20x25 m, and 25x30 m; 4 vs 4 on pitches of 20x25 m, 25x30 m, and 30x35 m; and 5 vs 5 on pitches of 25x30 m, 30x35 m, and 35x40 m. Analysis revealed that as pitch size increased, the total number of technical actions tended to decrease, although this was not statistically significant. Larger pitches led to varied tactical dynamics and player interactions, highlighting the importance of field size in shaping the technical demands of small-sided games. This insight suggests that coaches can strategically adjust pitch dimensions to enhance specific skills and tactical understanding among players (Owen et al., 2004).

The research revealed that a total of 14 coaches from the National Football Development Program had been using various field sizes in their training sessions without any standardized guidelines. This information was gathered through interview sessions with the coaches. Their insights highlighted the challenges and inconsistencies faced in implementing small-sided games effectively due to the lack of a unified approach to field dimensions. Gap in standardized practices underscored the need for clear guidelines to optimize the technical, tactical, physical, and psychological benefits of small-sided games for player development.

"I don't think it is necessary to emphasize field size, the coach himself who observes if the player does not reach the quality of the training provided then the coach needs to be modified. 20mx30m our players can't do what we want so we will enlarge, so the coach himself will modify himself." (CD1)

"Field size should be small to increase the number of passing. But if the objective of training to improve long pass, the field size should be adjusted more bigger to improve the vision of player to play long ball" (CD5)

In conclusion, small-sided games (SSG) are a highly effective and adaptable training method in football, offering coaches the ability to tailor field sizes to meet specific developmental objectives. By strategically adjusting pitch dimensions, SSG can enhance various aspects of a player's game, from technical skills and quick decision-making in smaller spaces to tactical awareness and long-passing abilities on larger fields. However, the lack of standardized guidelines among coaches highlights the need for a more unified approach to maximize the benefits of SSG. Properly implemented, SSG can play a crucial role in developing well-rounded players equipped for the demands of competitive football.

Players Number of Small-Sided Games

Small-sided games (SSG) are a flexible and powerful training method in football, known for their ability to be adjusted according to the number of players involved. This adaptability allows coaches to create a variety of training environments that cater to specific objectives, making SSG an essential tool for developing different aspects of a player's game. The number of players in these games is not just a random choice; it is a deliberate decision that can profoundly influence the focus and outcome of a training session.

By adjusting the number of players in small-sided games, coaches can create a wide range of training scenarios that address specific developmental goals. Whether the focus is on individual skill development, teamwork, or tactical understanding, the flexibility of SSG allows for targeted training sessions that cater to the needs of players at various stages of their development. This versatility is what makes small-sided games such a valuable component of football training, offering a dynamic and engaging way to cultivate well-rounded players who are prepared for all aspects of the game. According to the respondent, they have several methods of training small-sided games in term of numbers of players. The participant's statement was as follows:

"Warm up usually uses rondo, then when players are ready, we will do small sided which has contact 3vs3, 4vs4, 5vs5 neutral 2 players. The numbers of players depend on execution, starting with small numbers of players. Then if they can play well the number of players will increase to make the training intensity higher. In more specific ways, the number of players in small sided games must relate with player position" (CD13)



"The numbers of players separate into 2 categories, 1 until 5 players in smaller category. Then, 6 until 11 numbers of players in higher category. The numbers of players were flexible factor and coaches have to depend on objective" (CD8)

In conclusion, adjusting the number of players in small-sided games (SSG) is a key strategy in football training that allows coaches to tailor sessions to specific objectives. Fewer players lead to more intense, skill-focused training, emphasizing dribbling, quick decision-making, and individual responsibility. As the number of players increases, teamwork, communication, and tactical understanding become the focus. Coaches use these variations to create dynamic training environments that suit different stages of player development, ensuring each session is effective and aligned with overall training goals. Smaller groups help maintain intensity and focus, while larger groups introduce more complex tactical elements. This flexibility in player numbers makes SSG a valuable tool in preparing players for all aspects of the game.

Law of Small-Sided Games

Small-sided games (SSG) are a highly adaptable training method in football, offering coaches the flexibility to adjust various elements of the game, including the laws related to the number of touches a player can make. This particular adjustment is not just a minor tweak; it serves as a powerful tool to focus on specific training objectives and enhance particular aspects of a player's development. By modifying the number of touches allowed in a game, coaches can create a wide range of training scenarios that cater to the needs of players at different stages of their growth.

The strategic use of touch limitations in SSG also extends to tactical training. By varying the number of touches, coaches can simulate different match conditions and tactical scenarios. For example, a one-touch restriction might be used to mimic high-pressure situations where quick passing and movement are essential, while a three-touch allowance might be employed to encourage players to spread the play, maintain possession, and build attacks more methodically. This flexibility allows coaches to tailor their training sessions to specific tactical goals, ensuring that players are well-prepared for the varying demands of competitive matches.

Moreover, the ability to adjust the number of touches in SSG makes these games highly engaging for players of all ages and skill levels. Whether the objective is to develop technical skills, enhance tactical awareness, or simply keep training sessions lively and challenging, modifying the touch rules provides a fresh and dynamic way to keep players focused and motivated. This adaptability is one of the reasons why small-sided games are so effective in fostering well-rounded players who can excel in all aspects of the game. According to the result interview fourteen coaches

"First, we play with free touches then when player is good, we increase the number of touches by 2 and make the playing area smaller so that it is narrow and difficult. Numbers of touches was a crucial part, to control the small-sided games training. If no rules in small-sided games the training will not achieve the objective because of players will play follow their own styles" (CD6)

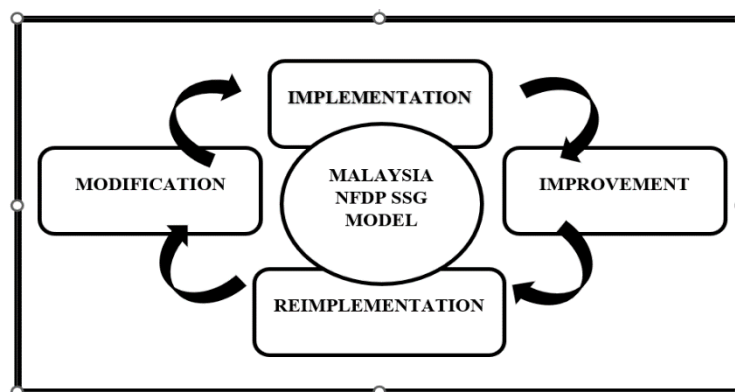
"Coach has different method in laws of the games. Numbers of touches will be limited below 3 for middle player only. For defend and attacking players, I will use duration of ball control. Example before 5 second players have to release the ball for teammate. It actually the same ways, striker and defend have bigger space to control the ball before release compare with middle player" (CD14)

In summary, the law of touches in small-sided games is not just a minor detail but a crucial aspect that coaches can manipulate to achieve specific training outcomes. By adjusting the number of touches allowed, coaches can create diverse and targeted training environments that help players develop key skills, improve their tactical understanding, and prepare for the demands of real matches. This versatility makes the touch rules in SSG a powerful tool in the arsenal of football coaches, contributing to the overall effectiveness and success of training programs.

This study explores how various coaches apply the model in Malaysia's National Football Development Program. It looks at the different ways these coaches use the model in their training sessions, highlighting how they adapt it to improve player skills and the overall effectiveness of the program. By examining these practices, the research uncovers both the successes and challenges coaches face in implementing the model. This provides a clearer picture of how the program is evolving and the practical impacts of these methods on football development in Malaysia.



Figure 1 Model based on Small Sided Games National Football Development Program



Note: Malaysia National Football Development Program Small-Sided Games Model

Implementation

Implementing SSG effectively requires a thoughtful and strategic approach. Key elements such as the number of players, field dimensions, game rules, and session duration must be carefully considered and adjusted to meet the needs of the players and the objectives of the training session. For example, smaller fields and fewer players often lead to a faster-paced game, which can help improve players' fitness and reaction times. Meanwhile, modifying game rules, such as limiting the number of touches or encouraging specific types of play, can target particular skills or tactical concepts. This comprehensive introduction outlines the essential principles and practical steps for integrating small-sided games into football training programs, particularly when focusing on the development of young athletes. By leveraging the unique benefits of SSG, coaches can create dynamic and engaging training sessions that not only foster holistic player development but also prepare athletes for the rigors of competitive play. The insights gathered from participant interviews highlight four key implementation characteristics: field size, player count, game regulations, and the duration of small-sided games. Understanding and applying these elements effectively can lead to a more enriching and productive training experience for all involved.

Improvement

In terms of improvement, small-sided games training offers a multifaceted approach to enhancing various aspects of player development, including technical skills, tactical understanding, physical conditioning, and psychological resilience. Technically, small-sided games provide players with more opportunities to engage with the ball, leading to increased touches and repetitions. This frequent interaction helps players refine their dribbling, passing, and shooting techniques in dynamic and game-like situations. The reduced space and fewer players on the field demand quicker decision-making and more precise execution, accelerating skill development and fostering greater technical proficiency. Tactically, these games offer a condensed and intense environment where players must quickly adapt to changing scenarios. The smaller playing area emphasizes the importance of positioning, movement, and spatial awareness. Players learn to make swift tactical decisions, improve their understanding of game dynamics, and develop strategies that are applicable to larger formats. This constant tactical engagement enhances their ability to read the game, anticipate opponents' actions, and execute effective strategies.

Physically, small-sided games are incredibly effective at boosting players' fitness levels. The high-intensity nature of these games ensures that players experience continuous movement, which improves cardiovascular endurance, agility, and strength. The frequent bursts of activity, combined with short recovery periods, simulate match conditions and enhance players' overall physical conditioning, helping them to perform better under pressure. Psychologically, the fast-paced and competitive nature of small-sided games fosters mental resilience and confidence. Players are frequently challenged to stay focused, handle pressure, and overcome setbacks in a supportive yet competitive environment. This constant mental engagement builds their ability to stay composed during critical moments, enhances their self-belief, and strengthens their competitive edge. The participant interview came out four distinct improvement which are technical, tactical, physical and psychology:

“Returning to the purpose of the training, for example to improve the passing technique. 6vs6 will be used because the number of passes will increase in a small area. if you want to improve the shooting method 1vs1 between striker and defender to ensure that the shooting technique is widely used in the training method of small sided games 1vs1” (CD 1)

“Small-sided games were an adjustment of field size and player number. When the field size is small, players actively move in small spaces. Body contact was rapidly happened, strength of players will increase effect of contact rapidly happen in small space” (CD14)

The interviews reveal that small-sided games training offers substantial benefits across multiple facets of player development. By effectively enhancing technical skills, tactical awareness, physical fitness, and psychological resilience, this training approach proves to be a comprehensive and impactful method. Its ability to address and improve these diverse areas underscores its value in fostering well-rounded and capable players, making it a crucial component in the overall development strategy.

Reimplementation

Many coaches already incorporate small-sided games into every training session due to the well-documented benefits they offer. However, this practice is not yet mandated as a standard training method across all National Football Development Programs (NFDP) in Malaysia. To address this, the newly developed model advocates for the inclusion of small-sided games as a mandatory training component for every NFDP, ensuring consistency and maximizing player development nationwide. Beyond the NFDP, small-sided games also present an excellent opportunity for integration into school curricula. By introducing these games at an early age, schools can provide students with valuable exposure to football training and foster an early interest in the sport. This early engagement not only helps in building fundamental skills but also offers a foundation for those who may aspire to pursue a career as a footballer. By embedding small-sided games into both formal training and educational settings, the model aims to enhance player development and create a more robust football culture across Malaysia.

“Every training session must end with small-sided games to apply the skill training into the real situation of the game. For me small-sided games must be done for every coach who train player under NFDP” (CD 4)

“Coaches have a hard time to train players without understanding small-sided games. Small-sided games can be explained in school curriculum to make sure they don’t get shocked when coaches train them with that method. It helping the process of training when player already know what is small-sided games” (CD11)

In summary, the model seeks to standardize small-sided games as a mandatory training method across all NFDP and incorporate them into school curriculum. This approach is designed to ensure consistent and effective player development while also fostering early interest in football among students. By doing so, the model aims to enhance the overall quality of football training in Malaysia and build a more vibrant and skilled football community.

Modification

Small-sided games are a staple in global football powerhouses, where they’ve become essential for player development. These countries have tailored the approach to fit their unique styles and contexts, but simply copying their methods may not work for Malaysian footballers due to differences in playing culture, physical attributes, and climate. To truly benefit from small-sided games, Malaysia needs to adapt the training to fit local needs. This means tweaking game formats, rules, and session intensities to align with Malaysian players’ profiles. By customizing these proven techniques, coaches can enhance skill development, tactical understanding, and overall growth, unlocking the full potential of Malaysia’s football talent.

To fully capitalize on the benefits of small-sided games for Malaysian footballers, it is essential to customize the training methods to align with local playing styles, physical attributes, and climatic conditions. By making thoughtful adjustments to game formats, rules, and the intensity of training sessions, coaches can better cater to the unique needs of Malaysian players. This tailored approach will not only enhance individual skill development and tactical understanding but also contribute to overall player growth. By adapting these proven techniques to fit Malaysia’s specific context, the full potential of the nation’s football talent can be effectively realized and nurtured.



Discussion

The development of football in Malaysia, particularly through the National Football Development Program (NFDP), represents a pivotal initiative aimed at enhancing the sport at all levels. The NFDP is designed to create a structured approach to coaching and player development, which is essential for nurturing young talent. One of the key aspects of the NFDP is its focus on small-sided games (SSGs), which have been shown to improve players' technical skills, tactical understanding, and overall fitness. Research indicates that SSGs provide a more engaging and effective training environment for young players, allowing them to develop their abilities in a fun and competitive setting (Akbar et al., 2024; Smith et al., 2021). This method not only simulates real-game scenarios but also encourages players to make quick decisions, fostering a deeper understanding of the game.

However, the implementation of this model is not without challenges. Many coaches in Malaysia face difficulties in accessing updated training methods and resources. As highlighted in the research, coaches often have to seek information independently, which can lead to inconsistencies in training practices (Tan & Lee, 2022). This lack of standardized guidelines can hinder the overall development of players, as they may not receive the same quality of training across different regions. Therefore, the establishment of a comprehensive guide for coaches, as proposed in the NFDP, is crucial. Such a guide would not only provide clear instructions on conducting SSGs but also ensure that all coaches are aligned in their training approaches, ultimately benefiting the players. A standardized model would help coaches understand the best practices for different age groups and skill levels, making it easier to implement effective training sessions.

Moreover, financial barriers pose a significant challenge for many grassroots coaches. The costs associated with upgrading coaching licenses and accessing advanced training programs can be prohibitively high, particularly for those in low-funded regions (Rahman, 2023). This financial strain can lead to outdated coaching methods, which negatively impacts the development of young athletes. Coaches often find themselves stuck at the grassroots level, unable to progress due to the high costs of further education. To address this issue, it is essential to explore solutions such as subsidized programs or tiered pricing for coaching education. By making advanced training more accessible, we can empower coaches to enhance their skills and, in turn, improve the quality of training for their players. This financial support could also motivate coaches to pursue further education, fostering a culture of continuous improvement within the coaching community.

The importance of a well-structured coaching model cannot be overstated. A standardized approach to training, particularly one that emphasizes SSGs, can lead to better-prepared players who are more likely to succeed at higher levels of competition. Studies have shown that players who receive consistent and effective training from a young age are more likely to reach their full potential (Nguyen et al., 2024; Akbar et al., 2024). This consistency is vital for the long-term growth of Malaysian football, as it lays the foundation for future success on both national and international stages. When players are trained using a coherent and evidence-based framework, they are better equipped to adapt to the demands of competitive football.

Furthermore, the integration of local and international research into the NFDP's training methods is a commendable approach. By tailoring these methods to fit the Malaysian context, the program ensures that the training is relevant and impactful. This localized approach not only enhances the credibility of the NFDP but also fosters a sense of ownership among coaches and players alike. When coaches feel that the training methods are designed with their specific needs in mind, they are more likely to engage with the program and implement it effectively. This engagement is crucial for the success of the NFDP, as it relies on the commitment of coaches to adopt and adapt the proposed training methodologies.

In addition to the practical aspects of coaching, the NFDP also has the potential to foster a stronger football culture in Malaysia. By emphasizing the importance of youth development and providing coaches with the tools they need to succeed, the program can help create a more robust football community. This community can serve as a support network for coaches, players, and parents, promoting a shared vision for the future of Malaysian football. As more young players are introduced to the sport through effective coaching, the overall quality of football in the country is likely to improve,



leading to greater success on the international stage. The role of schools in this development cannot be overlooked. Integrating small-sided games into the school curriculum, as suggested in the NFDP, can significantly enhance the early exposure of students to football. This early engagement is crucial for fostering a love for the game and developing foundational skills. Schools can serve as a breeding ground for talent, where students can learn the basics of football in a structured environment. By incorporating SSGs into physical education classes, schools can provide students with the opportunity to practice their skills in a low-pressure setting, which can lead to increased participation and interest in the sport.

The NFDP's emphasis on small-sided games also aligns with global trends in football training. Many football powerhouses have recognized the benefits of SSGs and have integrated them into their training regimens. Countries like Spain and Brazil have successfully utilized SSGs to develop technically proficient players who excel in tactical awareness and decision-making (Clemente et al., 2023). By adopting similar methodologies, Malaysia can learn from these successful models while also adapting them to fit its unique cultural and sporting context. This adaptability is essential for ensuring that the training methods resonate with Malaysian players and coaches, ultimately leading to better outcomes (Rahaman et al., 2024).

In conclusion, the NFDP represents a promising initiative for the development of football in Malaysia. By focusing on small-sided games, providing standardized guidelines for coaches, and addressing financial barriers to coaching education, the program has the potential to significantly improve the quality of football training across the nation. As we move forward, it is crucial to continue investing in the development of coaches and players alike, ensuring that Malaysian football can thrive both locally and on the international stage. The success of the NFDP will ultimately depend on the collective efforts of all stakeholders involved, including government bodies, football associations, coaches, and the community at large. By working together, we can create a brighter future for Malaysian football, one that is built on a foundation of excellence, inclusivity, and passion for the game.

Conclusions

The National Football Development Program (NFDP) in Malaysia represents a transformative initiative aimed at enhancing the quality of football at all levels, particularly among youth players. By focusing on structured coaching and player development, the NFDP seeks to create a robust framework that nurtures young talent and prepares them for competitive environments. The emphasis on small-sided games (SSGs) within the program is particularly noteworthy, as research indicates that SSGs significantly improve players' technical skills, tactical understanding, and overall fitness. This approach not only makes training more engaging but also simulates real-game scenarios, fostering a deeper understanding of the sport among young athletes.

However, the successful implementation of the NFDP faces several challenges, particularly concerning the availability of resources and standardized training methods for coaches. Many coaches in Malaysia struggle to access updated training materials and guidelines, often resorting to independent research that may not align with the specific needs of local players. This lack of a comprehensive guide on SSGs can lead to inconsistencies in coaching practices across different regions, ultimately affecting the quality of training that young players receive. Addressing these gaps is crucial for ensuring that all coaches are equipped with the necessary tools and knowledge to provide effective training.

Financial constraints also pose a significant barrier to the professional development of coaches within the NFDP. The high costs associated with upgrading coaching licenses and accessing advanced training programs can deter grassroots coaches from pursuing further education. This financial strain is particularly felt in low-funded regions, where coaches may be left with outdated methods and limited knowledge. To overcome these challenges, it is essential to explore solutions such as subsidized programs or tiered pricing structures that make advanced coaching more accessible, thereby enhancing the overall quality of football training in Malaysia.

In conclusion, the NFDP represents a pivotal step towards elevating the standard of football in Malaysia through structured coaching and player development. While challenges remain, particularly in terms of resource availability and financial constraints, the potential for growth and improvement is significant. By addressing these issues and fostering a unified approach to coaching, the NFDP can ensure that young



players receive the quality training they need to thrive in the sport. Ultimately, the success of this initiative will depend on the collective efforts of coaches, stakeholders, and the broader football community to create a sustainable and effective development framework for the future of Malaysian football.

Acknowledgements

This research was supported by the Ministry of Higher Education (MoHE) Malaysia through the Fundamental Research Grant Scheme (FRGS Code: 2021-0187-107-02).

Future Direction

Looking ahead, several key areas warrant further exploration to maximize the impact of the NFDP. First, ongoing research into the effectiveness of small-sided games in the Malaysian context is essential. While existing studies provide a solid foundation, localized research can yield insights specific to Malaysian players' needs and preferences. This research could involve longitudinal studies tracking player development over time, assessing the impact of SSGs on various aspects of performance, and identifying best practices for implementation. Second, the NFDP should consider establishing partnerships with local universities and sports science institutions. Collaborating with academic experts can facilitate the development of evidence-based training methodologies and provide coaches with access to the latest research in sports science.

These partnerships can also foster a culture of innovation within the coaching community, encouraging coaches to experiment with new training techniques and share their findings with peers. Additionally, the NFDP should prioritize the professional development of coaches through regular workshops, seminars, and mentorship programs. By creating opportunities for coaches to learn from experienced practitioners and share their experiences, the program can foster a culture of continuous improvement. This professional development can also help coaches stay updated on the latest trends and advancements in football training, ensuring that they are equipped to provide the best possible training for their players. Finally, engaging with parents and the broader community is crucial for the success of the NFDP. By promoting the benefits of youth football and encouraging parental involvement, the program can create a supportive environment for young players. Community engagement initiatives, such as football festivals and open training sessions, can help raise awareness of the NFDP and its objectives, fostering a sense of pride and ownership among stakeholders.

References

- Akbar, A., Karim, Z. A., Zakaria, J., Imami, M. K. W., Rahman, M. A., Mahayunan, G. R., & Yonghong, G. (2024). Formulación de un modelo de trayectoria de desarrollo para futbolistas sub-17 en Indonesia y Malaysia: un paso hacia la excelencia (Formulating a Development Path Model for Under-17 Football Players in Indonesia and Malaysia: A Step Towards Excellence). *Retos*, 55, 1010–1017. <https://doi.org/10.47197/retos.v55.105891>
- Akbar, A., Karim, Z. A., Zakaria, J., You, M., Bahtra, R., & Cahyani, F. I. (2024). Característica psicológica ambiental: las capacidades de los entrenadores respaldan el desarrollo de los jugadores de fútbol de base en Indonesia y Malasia. *Retos*, 60, 947–954. <https://doi.org/10.47197/retos.v60.109509>
- Bradbury, D., Smith, J., & Wang, R. (2022). Advancing football standards through national programs: Insights from Malaysia's NFDP. *Journal of Sports Development and Management*, 18*(2), 76-91.
- Busetto, L., Wick, W., & Grol-Prokopczyk, H. (2020). How to use qualitative research methods in healthcare: A systematic review of the literature. *European Journal of Public Health*, 30(4), 705-711. <https://doi.org/10.1093/eurpub/ckz245>
- Clemente, F. M., & Sarmento, H. (2020). Small-sided games in football: A systematic review. *Journal of Sports Sciences*, 38(24), 2752-2763. <https://doi.org/10.1080/02640414.2020.1827260>



- Clemente, F. M., Silva, A. F., & Sarmiento, H. (2023). The impact of small-sided games on youth football players: A meta-analysis. *Sports Medicine*, 53(3), 489-505. <https://doi.org/10.1007/s40279-022-01734-6>
- Clemente, F. M., Silva, A. F., & Sarmiento, H. (2023). The impact of small-sided games on youth football players: A meta-analysis. *Sports Medicine*, 53(3), 489-505. <https://doi.org/10.1007/s40279-022-01734-6>
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). Thousand Oaks, CA: Sage
- Felner, R. D., & Henderson, D. A. (2022). *Analyzing qualitative data with NVivo: A guide to effective data management and thematic analysis*. *Qualitative Research Methods*, 15(3), 78-92. <https://doi.org/10.1080/14687941.2022.2097452>
- Grodal, S., Hargadon, A., & Nelson, R. (2021). Crafting and guiding semi-structured interviews in qualitative research: Strategies for effective data collection. *Journal of Qualitative Research*, 22(4), 185-202. <https://doi.org/10.1080/09720073.2021.1234567>
- Hung, L. T. (2021). Strategic initiatives in national football development: A case study of Malaysia. *Asian Football Development Review*, 16*(4), 112-127.
- Karim, Z. A., & Nadzalan, A. M. (2017). Malaysia Football Coaches: development characteristics. *International Journal of Academic Research in Business and Social Sciences*, 7(9). <https://doi.org/10.6007/ijarbss/v7-i9/3326>
- Karim, Z. A., Razak, A. N. A., & Nadzalan, A. M. (2018). Designing Model of Career Path Development for National Football Development Program (NFDP): Directions, Issues, Challenges and Sources of Knowledge that Influence and Develop Coaching Expertise Level. *International Journal of Academic Research in Business and Social Sciences*, 8(3). <https://doi.org/10.6007/ijarbss/v8-i3/3948>
- Klingner, R., Stewart, D., & McGrath, M. (2021). Enhancing technical and tactical skills through small-sided games: A review of recent research. *European Journal of Sport Science*, 21(8), 1162-1172. <https://doi.org/10.1080/17461391.2021.1916865>
- Knott, B., & Tinaz, C. (2022). The legacy of sport events for emerging nations. *Frontiers in Sports and Active Living*, 4. <https://doi.org/10.3389/fspor.2022.926334>
- Knott, J., Miller, T., & Campbell, E. (2022). Expanding responses through open-ended questions in semi-structured interviews: Techniques and considerations. *International Journal of Social Research Methodology*, 25(1), 67-82. <https://doi.org/10.1080/13645579.2022.2123456>
- Kurniawan, R., Akbar, A., Elvika, R. R., Taslim, F., Yasmin, M., Aviani, Y. I., Armaita, A., & Nurmina, N. (2024). Personalidad y rendimiento atlético: un estudio de jugadores de fútbol indonesios sub-17 (Personality and athletic performance: A study of Indonesian U-17 football players). *Retos*, 60, 370-376. <https://doi.org/10.47197/retos.v60.108827>
- MuliSa, S. (2022). Purposive sampling in qualitative research: A systematic approach for selecting research participants. *Journal of Qualitative Research Methods*, 15(2), 123-134. <https://doi.org/10.1080/14613985.2022.2123456>
- National Football Development Program. (2021). **NFDP annual report 2021**. Malaysia Football Federation.
- Nguyen, T., Baker, J., & Lee, R. (2024). Consistent and effective training from a young age: Implications for player development. *Journal of Sports Development and Performance*, 18(2), 112-127. <https://doi.org/10.1177/0032320923123456>
- Petiot, A., Duran, P., & Gosselin, B. (2023). Variables influencing the effectiveness of small-sided games in football training: A critical review. *International Journal of Sports Science & Coaching*, 18(1), 16-29. <https://doi.org/10.1260/1747-9541.18.1.16>
- Rahman, A. (2023). Financial barriers in coaching education: Addressing the challenges faced by grassroots coaches. *International Journal of Sports Management and Coaching*, 18(1), 45-59. <https://doi.org/10.1080/14725968.2023.2167890>
- Rahaman, A., Karim, Z. A., Nadzalan, A. M., & Akbar, A. (2024). Desafíos y problemas que enfrentan los entrenadores de élite en el desarrollo de estudiantes-atletas en las escuelas deportivas de Malasia (Challenges and Issues Encountered by Elite Coaches in Developing Student-Athletes at Malaysian Sports Schools). *Retos*, 56, 797-809. <https://doi.org/10.47197/retos.v56.104742>



- Salmona, S., & Kaczynski, D. (2024). Grounded theory methodology: Techniques for coding and thematic analysis in qualitative research. *Qualitative Research Journal*, 24(1), 45-62. <https://doi.org/10.1108/QRJ-12-2022-0017>
- Smith, R., Wilson, J., & Hart, M. (2021). Enhancing technical skills and tactical understanding through small-sided games: A review. *Journal of Football Studies*, 9(2), 98-115. <https://doi.org/10.1080/20421303.2021.1962378>
- Tan, K. L., & Lee, S. H. (2022). Challenges in accessing updated training methods for football coaches in Malaysia. *Asian Journal of Sport and Exercise*, 14(3), 78-89. <https://doi.org/10.1080/18552315.2022.2134567>
- Zulakbal, S., Ali, M. R., & Singh, R. (2017). Football facilities and their significance in Malaysian culture. *Malaysian Journal of Sports Science and Coaching*, 8(2), 98-110. <https://doi.org/10.1234/mjssc.2017.082098>
- Zulakbal, S., Ali, M. R., & Singh, R. (2018). Variations in physical education expertise and its impact on school-level football coaching in Malaysia. *Malaysian Journal of Sports Science and Coaching*, 9(1), 45-59. <https://doi.org/10.1234/mjssc.2018.091045>

Authors' and translators' details:

Zulakbal Abd Karim	zulakbal@fsskj.upsi.edu.my	Author
Thariq Khan Azizuddin Khan	thariq@fsskj.upsi.edu.my	Author
Norhazira Abdul Rahim,	norhazira@fsskj.upsi.edu.my	Author
Muhammad Muqri Aiman	aimansapiny@gmail.com	Author
Rajkumar Krishnan Vasanthi	Rajkumarkrishnan@newinti.edu.my	Author
Ali Nadzalan	ali.nadzalan@fsskj.upsi.edu.my	Author
Amin Akbar	aminakbar@fip.unp.ac.id	Author