The Development of the "BEYB" Defensive Tactics Model in Futsal Games

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ABSTRACT

Futsal is a game that requires rapid transitions between offensive and defensive methods. The objective of this research is to build a futsal defensive strategy. This study employs a method of development using a model of development created by Brog and Goll. The development phase begins with problem analysis, followed by product design, validation of the designed model, product revision and testing, revision of product test findings, and the obtained model. The expected development is a model for developing futsal defensive strategies known as "BEYB" defensive strategies. The investigation was done at the State University of GOR Futsal FIK Makassar. Participants in this study were futsal players from the city of Makassar. The data collection method leveraged the development phase and administered a different test to up to 120 students. Based on the processed data, the results of this study conclude that there are 30 models of defensive tactics in Futsal, and after testing, that the tactical model produced is viable and effective for usage in Futsal

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1. INTRODUCTION

Sport is one of the tools to unify the nation (Kusumiadi et al., n.d.; Noorzaman & others, 2020; Pelana, 2013; Utami, 2015). This is because many members of society enjoy a particular sport. Therefore, they feel proud of their region's success in regional, national, and international sports events. Consequently, it is not incorrect to refer to sports as a unifying force for the nation. In addition, exercise can also be a means of improving one's fitness (Ronkainen et al., 2021; Te Velde et al., 2018; Vanin et al., 2018). This is because exercising motion activities can improve a person's physical state. However, others exercise for purely recreational purposes. This group does not usually engage in physical activity, but they do so periodically to socialize and seek entertainment.

One of the most popular sports among all individuals is futsal (Prabowo et al., 2020; Ribeiro et al., 2021; Spaaij & Schaillée, 2020; Travassos et al., 2018). The development of futsal fields has become an attraction in and of itself, as Futsal has proven especially popular among young children. Therefore, we can see that futsal grounds in Indonesia are frequently located adjacent to cafes and other relaxation spots. However, Futsal played by the community is only for recreation and is played once every week.

In 1930, Uruguay introduced the "five-on-five" version of Futsal. Futsal is the international name for the sport, a mix of the Spanish phrase "futbol sala" and the Portuguese phrase "Futebol de salao." It translated as indoor football. Futsal is becoming increasingly popular in South America, mainly in Sao Paulo, Brazil. (Burns, 2003). The sport of Futsal is highly familiar in Indonesia. This is owing to the game's widespread support and socialization in Indonesian culture. Numerous futsal events are also held so that the sport may grow popular in Indonesian culture. This is also demonstrated by establishing a dedicated futsal school for youngsters in Indonesia, which provides early coaching.

South Sulawesi is one of the most active regions in nurturing and implementing futsal championships, including student, inter-club, and professional club competitions. To be able to donate players to the Indonesian national team, it was necessary to build a strong team capable of competing locally and nationally for a championship. However, the South Sulawesi Futsal Team's performance at the National Sports Week event was not worthy of a proud accomplishment. Multiple national titles, such as the National Sports Week (PON) and the National Student Sports Week, demonstrate this outcome (POMNAS). In 2012, the South Sulawesi Futsal PON squad lost at the XVIII National Sports Week (PON) in Riau, the West Java XIX Pre-PON 2015 in Bali, and the 2015 POMNAS competition in Aceh.

Based on the findings of a needs analysis conducted by researchers in the futsal course for fourth-semester 2019/2020, students enrolled in the futsal course. It was determined that: 1) Only 10% of futsal athletes knew the attacking principles of the game, and 2) Only 15% of futsal athletes knew the defensive principles of the game. Furthermore, 3) 20% of futsal athletes are familiar with the attack zone system; 4) 25% are familiar with the defensive zone system. Therefore, for students to comprehend the futsal ball game, professors must naturally build futsal defensive strategies.

In Futsal, in addition to outstanding physical endurance, technical preparation, tactics, and player psychology are required to attain optimal performance (Damian & Damian, 2018; Lago-Fuentes et al., 2020; Nawir, 2020). The team's defensive strategy is an essential component of the futsal technique. This is because Futsal requires quick transitions from offensive to defensive strategies. Therefore, the trainer must attempt to establish a defensive model for the animal to survive effectively. A coach must be able to quickly switch from an offensive to a defensive strategy or vice versa so that the opponent's pressing is tight while the opponent is attacking. This study's development of futsal defensive strategies is based on the results of a needs analysis so that they can be implemented in futsal games.

The issue is the low degree of defensive tactic development in futsal games; hence, it is required to build multiple models of defensive tactics that may be utilized as references when playing Futsal. The established defensive tactics model is known as the defensive tactics model and comprises the 2-2 model, the man-to-man marking model, the diamond formation, and total pressing. This concept has been developed extensively, mainly through study findings (Jovanovic et al., 2011; Oppici et al., 2019). The results show that various tactical models can help produce various futsal games so that the tactics used are difficult for opponents to read.

Based on the description of the background of the problem, it is essential to develop a defensive mode in the futsal game, and this aims to make the defensive tactics in the futsal game more varied so that they can develop well in the futsal game. By explaining the problem, this research aims to produce a development model for survival in playing Futsal.

2. METHODS

This study employs a method of development using a model of development created by Brog and Goll. The expected development is a model for developing futsal defensive strategies known as "BEYB"

defensive strategies. The investigation was conducted at GOR Futsal FIK Makassar State University. This study's participants were futsal athletes from the city of Makassar. As many as 120 individuals were sampled from the student population.

Observations and interviews were performed to evaluate the issues surrounding creating a futsal defensive tactical concept. In addition, observations and interviews were conducted during the futsal course learning process. Experts in the realm of futsal, test and measurement specialists, and development specialists ranging from futsal coaches to futsal players are involved in Rand D's study.

The period required for research and development concerning Borg and Gall research and development is three months beginning in April 2019 and ending in June 2019, with the following specifics: a) Needs analysis; b) Model development planning; c) Training tactical model design development; d) Expert validation and model revision; e) Small group trial and revision; f) Field trials and revisions. This is how the development model might be described:

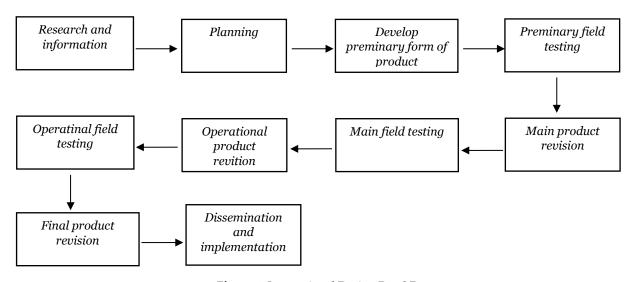


Figure 1. Instructional Design Rand D

Source: (Walter R. Borg & Meredith D. Gall, 1983)

In this study, the characteristics of the produced model are types of strategy-based defensive tactics (Beyb) models in the futsal game. At the same time, the drilling technique and training strategy are applied. The development of a strategy-based defensive training tactics model (Beyb) in futsal will be collated and developed in the form of modification and creativity in the form of attacking and defending futsal skills training tactics. Cones, markers, leaders, strategy boards (tactical boards), whistles, stopwatches, futsal balls, and vests were used to construct this training tactical model's infrastructure and amenities. In futsal games, in addition to developing a strategy-based defensive training tactical model (Beyb), the form of this tactical training model is varied with physical exercises that support the ability to play futsal, such as endurance, agility, strength, speed, explosive power, coordination, accuracy, balance, and power.

Before and after implementing Beyb's defensive strategies, a difference test was conducted to evaluate the produced model. Reading the opponent's movement, zone correctness, zone movement, predicting the opponent's attack, taking advantage of opportunities, saving the goal, and working together to save the goal are defensive evaluation criteria.

3. FINDINGS AND DISCUSSION

The results of developing a strategy-based defensive tactics model (chapter) in Futsal games are presented in the following steps:

3.1 Results of needs analysis

The overall objective of this development research is to construct a model of Beyb's futsal defensive approach. This model was created based on field study through observations and interviews, as well as the author's expertise as a futsal coach and lecturer at the Makassar State University GOR. The results of the data collected by researchers through interviews and field observations are then processed, described in writing, and a conclusion is drawn. Some findings of the results of interviews and field observations can be described as follows: the defensive training that has been conducted thus far is less varied, and its nature is too monotonous because they have not used tactical training models that combine different types of exercises. In the meantime, based on the interview results, it is known that the introduction of defensive strategies in training is restricted to a few simple motions, with no information about the current evolution of futsal. Furthermore, the coaches have not yet optimized the players' talents and the infrastructure surrounding the field because the training is based on the instructor, not the athletes or students.

3.2 Final Model

Based on the needs analysis and product revision, 30 models of defensive training tactics were produced in a line of strategy in Futsal games which were declared final.

Table 1. Strategy-based Defensive Training tactics model (chapter) in Futsal Games.

No	Tactics	Description
1	The Square 2-2 Defensive practice tactics	In the defensive training tactics of The Square 2-2 system, researchers have developed eight
		types of defensive training tactics
		Training field area: 25 meters x 20 meters Exercise: 1. When player C has control of the ball, the advancing player A presses player C 2. When player C passes Player A, then Player B presses on player C 3. If player C passes to player D, then player B, who moves to presses Objective: Players make moves to defend and snatch
		the ball from the opponent
		 Training field area: 25 meters x 20 meters Exercise: Player 2 is responsible for the area bounded by the line ABC and the edge line Player 1 is responsible for the area bounded by the ACE line and the sideline.
		3. Player 4 is responsible for the area bounded by the ABD line and the edge line4. Player 3 is responsible for the area bounded by the ADE line and the edge line

Tactics

No

TRANSMAN TOTAL STATE OF THE ST

Objective :

Players make moves to defend and snatch the ball from the opponent

Description

Training field area: 25 meters x 20 meters Exercise :

- 1. The ball is in player A and passes to player B
- 2. Defender 1 comes to player B to guard
- 3. Defender 2 just shifts slightly to close the passing path to player C
- 4. Defending player three shifts to the middle to dominate the space that will be filled by player C
- 5. Defender 4 shifts to cover and guard against D . players

Objective:

Players make moves to defend and snatch the ball from the opponent

Training field area: 25 meters x 20 meters Exercise :

- 1. The ball is in player A and passes to player B
- 2. Defender 1 comes to player B to guard
- 3. When player A moves to the front of the defense, Defender 2 backs off defense to close the pass to player A
- 4. Defending player three shifts to the middle to dominate the space that will be filled by player C
- 5. Defender 4 shifts to cover and guard against D . players

Objective:

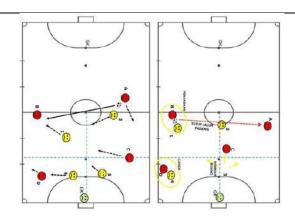
Players make moves to defend and snatch the ball from the opponent

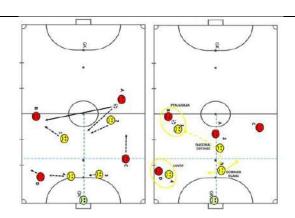
Training field area: 25 meters x 20 meters Exercise:

- 1. The ball is in player A and passes to player B
- 2. Defender 1 comes to player B to guard
- 3. Defender 2 retreats to the middle guarding player A who opened space
- 4. Defender 3 stays in position to dominate the space in the middle
- 5. Defender 4 shifts to cover defender one and keep player D

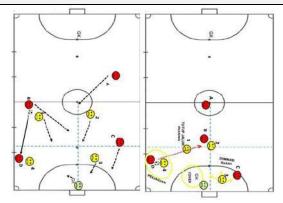
Objective:

Players make moves to defend and snatch the ball from the opponent





No Tactics Description



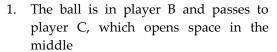
Training field area: 25 meters x 20 meters Exercise:

- 1. The ball is in player B and passes to player D
- 2. Defender 4 comes to player D to guard
- 3. Defender 1 returns to defence to close the pass to player B, which opens space
- 4. Defender 3 shifts to the centre to dominate the space that will be filled by player C
- 5. Defender 2 steps back slightly to narrow the space and anticipate the movement of player A

Objective:

Players make moves to defend and snatch the ball from the opponent

Training field area: 25 meters x 20 meters Exercise:



- 2. Defender 3 comes to player C to guard
- 3. Defender 1 returns to defence to close the pass to player D
- 4. Defender 2 retreats to the centre to dominate the space that will be filled by player C or B
- 5. Defender 4 retreats to the centre to cover

Objective:

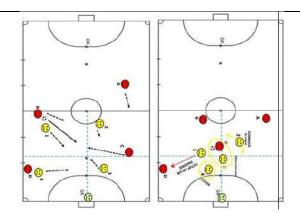
Players make moves to defend and snatch the ball from the opponent

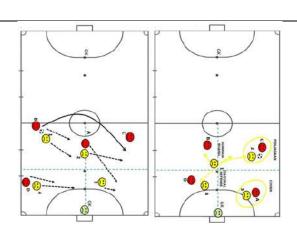
Training field area: 25 meters x 20 meters Exercise:

- 1. The ball is in player B, and the lob passes to player C, which opens space
- 2. Defender 2 comes to player C to guard
- 3. Defending player one returns to defence to dominate the space that will be filled by player B or D
- 4. Defender 3 shifts to cover and guard player A who opens space
- 5. Defender 4 shifts to the centre, narrowing player D's space and forming a diagonal defence

Objective:

Players make moves to defend and snatch the ball from the opponent





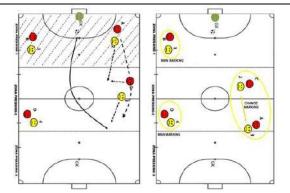
No

2 Defensive Training Tactics man-to-man marking system

Tactics

Researchers have developed six types of defensive training tactics in this man-to-man marking system of defensive training tactics.

Description

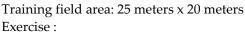


Training field area: 25 meters x 20 meters Exercise:

- 1. The ball is in the goalkeeper
- 2. Each defender keeps one opponent tight so that the goalkeeper has no choice but to throw the crew in front of him
- 3. When the ball is thrown by the goalkeeper towards player A who opens the space, then defender two, who was guarding player A, goes down to the middle
- 4. And the one who replaces player A is player C with a closer distance

Objective:

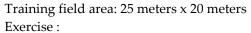
Players make moves to defend and snatch the ball from the opponent



- 1. The ball is in the goalkeeper
- 2. Give one opposing player who is near the space goalkeeper so that he is given the ball
- 3. When the ball goes to player A, defender two comes to guard against player A
- 4. Other defenders protect each of the opposing players

Objective:

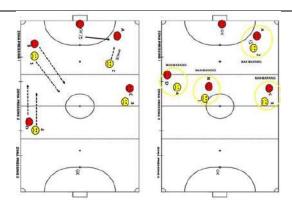
Players make moves to defend and snatch the ball from the opponent

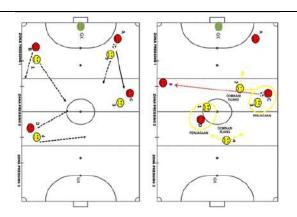


- 1. The ball is in player A and passes to player C
- 2. Defender 3 comes to player C to guard
- 3. Defender 2 retreats to dominate players C and A . spaces
- 4. Defender 3 shifts to the middle to guard player D
- 5. Defender 4 shifts to the centre to dominate players D and C . spaces

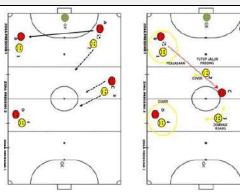
Objective:

Players make moves to defend and snatch the ball from the opponent





No Description **Tactics**



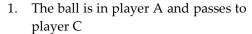
Exercise: The ball is in player A and passes to

Training field area: 25 meters x 20 meters

- player B
- 2. Defender 1 comes to player B to guard 3. Defender 2 backs down to close the pass to player C and cover player 1
- 4. Defender 3 shifts to the middle to dominate the space that will be filled by player C
- 5. Defender 4 shifts to the centre to cover Objective:

Players make moves to defend and snatch the ball from the opponent

Training field area: 25 meters x 20 meters Exercise:



- 2. Defender 3 comes to player C to guard and try to get the ball
- 3. Defender 2 returns to the ball to block the opponent's movement
- 4. Defender 1 shifts to the middle to protect against player A
- Defender 4 shifts to the centre to dominate the D player space and cover



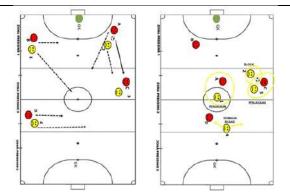
Players make moves to defend and snatch the ball from the opponent

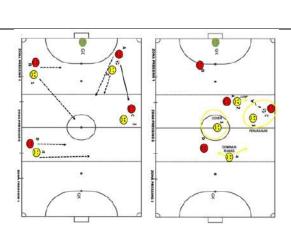
Training field area: 25 meters x 20 meters Exercise:

- The ball is in player A and passes to player C
- 2. Defender 3 comes to player C to guard and try to get the ball
- 3. Defender 2 returns to follow the movement of player A who opens the middle room
- 4. When player C is dribbling in the middle, then player A comes along with player A to win the ball
- 5. Defender 1 shifts to the center to cover player A
- 6. Defender 4 shifts to the center to dominate the D player space and cover

Objective:

Players make moves to defend and snatch





No **Tactics** Description the ball from the opponent Defensive Training Tactics the diamond system In the diamond system of defensive training tactics, researchers have developed seven types of defensive training tactics Training field area: 25 meters x 20 meters A Exercise: 1. Player 2 is responsible for the area bounded by the triangle ECD 9 1 2. Player 3 is responsible for the area bounded by the triangle EAB. 3. Player 1 is responsible for the area bounded by the triangle CEA Player 4 is responsible for the area bounded by the triangle EBD Objective: Players make moves to defend and snatch the ball from the opponent Training field area: 25 meters x 20 meters Exercise: 1. The ball is in player A and passes to player B 2. Defender 1 comes to player B to guard 3. Defender 2 shifts slightly to close the passing path to player C 4. Defending player three shifts to the middle to dominate the space that will be filled by player C Defender 4 shifts to cover and guard against D. players Objective: Players make moves to defend and snatch the ball from the opponent Training field area: 25 meters x 20 meters Exercise: 1. The ball is in player A and passes to player B 2. Defender 1 comes to player B to guard 3. When player A moves to the front of the defense, Defender 2 backs off defense to close the pass to player A 4. Defending player three shifts to the middle to dominate the space that will be filled by player C 5. Defender 4 shifts to cover and guard against D. players Objective:

Players make moves to defend and snatch

the ball from the opponent

No Tactics Description Training field area: 25 meters x 20 meters Exercise:



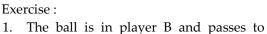


- 1. The ball is in player A and passes to player B
- 2. Defender 2 comes to player B to guard
- 3. When player A moves forward, Defender 1 backs off defense to close the pass to player A
- 4. Defender 3 shifts to the middle to dominate the middle space, which will be filled by player A
- 5. Defender 4 shifts to cover and guard against D . players

Objective:

Players make moves to defend and snatch the ball from the opponent

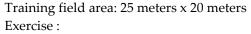
Training field area: 25 meters x 20 meters



- 2. Defender 4 comes to player D to guard and try to get the ball
- 3. Defender 2 returns to defense to close the pass to player B, which opens space
- 4. Defender 3 shifts to the center to cover and guard against player C
- 5. Defender 1 steps back slightly to dominate the space in the middle that will be filled by player A or D

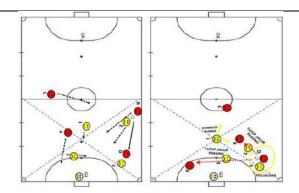
Objective:

Players make moves to defend and snatch the ball from the opponent



- 1. The ball is in player B and passes to player D
- 2. Defender 4 comes to player D to guard and try to get the ball
- 3. Defender 2 returns to defense to close the pass to player B, which opens space
- Defender 1 retreats to the center to dominate the space in the middle, which will be in the hands of players B and C
- 5. Defender 3 shifts to the middle to prevent passing to player A





Objective:

Description No **Tactics** Players make moves to defend and snatch the ball from the opponent Training field area: 25 meters x 20 meters Exercise: 1. The ball is in player B, and the lob passes to player A which opens space 2. Defender 3 comes to player A to guard and try to get the ball Defender 1 returns to defense to close the pass to player C, which opens space 4. Defender 2 retreats to the center to dominate the space that will be filled by players C and B Defender 4 shifts to cover Objective: Players make moves to defend and snatch the ball from the opponent Tactics Defensive training triangular system (1-In this triangular system of defensive 1-2)training tactics, researchers have created 1 type of defensive training tactic Training field area: 25 meters x 20 meters В A Exercise: 1. Player 3 is responsible for the area bounded by triangle ABE 2. Player 2 is responsible for the area bounded by the triangle ECD 3. Player 4 helps players 2 and 3 in the D ACE triangle 4. Player 1 is a free player who assists player four and moves between the Ac line and the goal line. Objective: Players make moves to defend and snatch the ball from the opponent Tactics Full pressure defensive training (total In this (total pressing) defensive training tactic, researchers have made 1 type of pressing) defensive training tactic Training field area: 25 meters x 20 meters @ H Each player guards one opponent striker in all fields and follows him wherever he goes ◎ E Objective: Players make moves to defend and snatch the ball from the opponent Tactics Defensive practice pressing the player In the defensive practice tactics to suppress with the ball the players who carry the ball, researchers

No **Tactics** Description have made 1 type of defensive training tactics Training field area: 25 meters x 20 meters Exercise: 1. The player puts pressure on the player with the ball, forcing him to make a ◎ E mistake. 2. One of the teammates must help monitor the movement of the opposing Objective: Players make moves to defend and snatch the ball from the opponent Tactics Defensive practice pressing half the pitch In the Tactics Defensive practice pressing (half court pressing) half the pitch (half court pressing), This researcher has made 1 type of defensive training tactic. Training field area: 25 meters x 20 meters Exercise: In this form of defense exercise, the more distance from the player to the goal, the less intensity of attack made by the opponent. 2. When the attacker carrying the ball C reaches the center line of the field, the guard must be intensified, cutting off all corners of the ball's passing 3. In the zone, the opponent is not given a definite space for the opposing attacker to receive the ball Objective: Players make moves to defend and snatch the ball from the opponent Three vs. four system defensive training tactics In this three vs. four system of defensive training tactics, researchers have made 1 type of defensive training tactic. Training field area: 25 meters x 20 meters Exercise: 1. In this form of defense exercise, the more distance from the player to the goal, the less intensity of attack made by the opponent. When the attacker carrying the ball **:** reaches the center line of the field, the guard must be intensified, cutting off all corners of the ball's passing 3. In the zone, the opponent is not given a definite space for the opposing attacker

No	Tactics	Description
		to receive the ball Objective: Players make moves to defend and snatch
9	Defense practice tactics against the power play system	the ball from the opponent In this defensive training tactics against the power play system, researchers have developed 4 types of defensive training tactics.
	TOTAL DATE OF THE PARTY OF THE	 Area lapangan latihan: 25 meter x 20 meter Exercise: 1. The ball is in player A and passes to player B 2. Defender 1 comes to player B to guard 3. Defender 2 retreats defense to close the middle space 4. Defender 3 shifts to the middle to narrow the space for player D. So that a diagonal defense is formed between defenders 1,2, and 3 5. Defender 4 shifts to cover and guard against D. players Objective: Players make moves to defend and snatch
	TUTHUR ALL DE PARTIE DE LA CONTRA DE LA CONTRA DE CONTRA	the ball from the opponent Training field area: 25 meters x 20 meters Exercise: 1. The ball is in player A and passes to player B 2. Defender 1 comes to player B 3. Defender 2 steps back slightly to close the pass to player C 4. Defender 3 shifts to the middle to dominate the space in the middle, which D players will fill 5. Defender 4 shifts to cover and guard against player E Objective:
	COVIN A STATE OF THE STATE OF T	5. Defender 4 shifts to cover a against player E

No Tactics

Description

Training field area: 25 meters x 20 meters Exercise :

- 1. The ball is in player A and passes to player C
- 2. Defender 2 comes to player C to guard
- 3. Defender 1 retreats to close the space in the middle
- 4. Defender 4 shifts to the side of the defense to cover and guard player D, who opens space
- 5. Defending player three shifts to the center to guard against player E who opens space to form a diagonal defense between players 1,2, and 3

Objective:

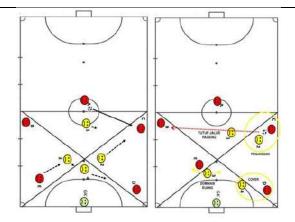
Players make moves to defend and snatch the ball from the opponent

Training field area: 25 meters x 20 meters Exercise:

- 1. The ball is in player A and passes to player C
- 2. Defender 2 comes to player C to guard
- 3. Defender 1 shifts slightly to close the pass to player B
- 4. Defender 4 shifts to the side of the defense to cover and guard player D, who opens space
- 5. Defender 3 retreats slightly to dominate the space in the middle that will be filled by player E

Objective:

Players make moves to defend and snatch the ball from the opponent



3.3 Model Eligibility

After carrying out the data collection stage and drafting a strategy-based defensive tactics model (beyb) in the Futsal game, the next step is to conduct an expert test where the goal is to obtain the feasibility or validity of the model made with direct assessment from the expert, with the result that the model is found to be feasible or valid. The established strategies are applicable and can be utilized in futsal games. Validation is accomplished by supplying a form containing the developed tactics' viability. The development of the model suggests that the movement must progress from easy to challenging levels, beginning with the fundamentals, variations, and combinations, as well as the complexity of the movements and that the upper and lower body parts, dominant and non-dominant bodies, must be trained comprehensively.

3.4 Effective Model

The BEYB defensive exercise tactics model was based on the strategy of the Futsal game that the researchers made after being evaluated by experts, then underwent a phase one revision. After the product design was revised, the model was tested in a small group trial with 15 research subjects.

Table 2. Results of the Expert's Revision of the BEYB futsal training model

No	BEYB Training Model	Suggestions and Feedback
1.		It can be applied, (research subjects/athletes must have good
	Defensive training tactical model 1	coordination, agility and speed to be able to carry out their duties)
2.	Defensive training tactical	It can be applied, (research subjects/athletes must have good
	model 2	coordination, agility and speed to be able to carry out their duties)
3.	Defensive training tactical model 3	It can be applied, (research subjects/athletes must have good coordination, agility and speed to be able to carry out their duties)
4.	Defensive training tactical model 4	It can be applied, (research subjects/athletes must have good coordination, agility and speed to be able to carry out their duties)
5.	Defensive training tactical	It can be applied, (research subjects/athletes must have good
	model 5	coordination, agility and speed to be able to carry out their duties)
6.	Defensive training tactical model 6	It can be applied, (research subjects/athletes must have good coordination, agility and speed to be able to carry out their duties)
7.	Defensive training tactical model 7	It can be applied, (research subjects/athletes must have good coordination, agility and speed to be able to carry out their duties)
8.	Defensive training tactical model 8	It can be applied, (research subjects/athletes must have good coordination, agility and speed to be able to carry out their duties)
9.	Defensive training tactical model 9	It can be applied, (research subjects/athletes must have good coordination, agility and speed to be able to carry out their duties)
10.	Defensive training tactical model 10	It can be applied, (research subjects/athletes must have good coordination, agility and speed to be able to carry out their duties)
11.	Defensive training tactical model 11	It can be applied, (research subjects/athletes must have good coordination, agility and speed to be able to carry out their duties)
12.	Defensive training tactical model 12	It can be applied, (research subjects/athletes must have good coordination, agility and speed to be able to carry out their duties)
13.	Defensive training tactical model 13	It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their duties)
14.	Defensive training tactical model 14	It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their

15.	Defensive training tactical model 15	duties) It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their duties)
16.	Defensive training tactical model 16	It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their duties)
17.	Defensive training tactical model 17	It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their duties)
18.	Defensive training tactical model 18	It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their duties)
19.	Defensive training tactical model 19	It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their duties)
20.	Defensive training tactical model 20	It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their duties)
21.	Defensive training tactical model 21	It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their duties)
22.	Defensive training tactical model 22	It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their duties)
23.	Defensive training tactical model 23	It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their duties)
24.	Defensive training tactical model 24	It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their duties)
25.	Defensive training tactical model 25	It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their duties)
26.	Defensive training tactical model 26	It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their duties)
27.	Defensive training tactical model 27	It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their duties)
28.	Defensive training tactical model 28	It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their duties)
29.	Defensive training tactical model 29	It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their duties)
30.	Defensive training tactical model 30	It can be applied (research subjects/athletes must have good coordination, agility, and speed to be able to carry out their duties)

3.5 Effectiveness test

Assessment data from 60 research subjects on the efficacy of the strategy-based attack and defense training tactics model (beyb) in futsal games, namely the SPSS 21 output results indicating that the average value of survival before receiving the defensive training model is 14.67 and after receiving treatment with the defensive training model, the average value of survival is 15.33. The defensive practice tactics model 22.22 indicates an increase in the average value of the defensive tactics model in futsal games.

The significance test of the difference with SPSS 21 yielded the following results: t-count = -19,953; df = 59; and p-value = 0.00 0.05, indicating a significant difference between the defensive training model before and after receiving the Futsal training model. Based on these findings, it is possible to conclude that the strategy-based defensive tactics training model (beyb) in the developed Futsal game is effective and can enhance defensive training in the Futsal game. The defensive technique is a technique utilized in futsal defense. (Ni'mah et al., 2018; Rinaldi & Rohaedi, 2020). In the developed technique, players are instructed to be able to take the proper position.

The feasibility and effectiveness test results show that the developed technique is effective and feasible to use in playing futsal. Effective because after the significance test before and after are significantly different. Futsal is a game that prioritizes speed in changing positions and strategies. Movements mainly occur when attacking to defending; therefore, good defensive techniques must be used to dampen the opponent's game when the opponent turns to attack. Futsal is also a game that relies on stamina, meaning that players must have good stamina when competing (Ahmed et al., 2017; Almeida et al., 2019; Barbero-Alvarez et al., 2008; de Freitas et al., 2017; Gómez et al., 2019; Rahman, 2018; Sarmento et al., 2015). Thus, the speed and agility of players can determine the final result, in addition to the ingenuity of the coach in concocting strategies in attack and defense.

The results of this study are supported by research (Alfiyansah, 2016) concluded that the attack and defense strategies developed were effective in playing futsal. Based on the discussion, the defensive tactics developed were effective in playing futsal. Futsal game courses must teach students how to develop defensive tactics so that when they become a teacher or futsal coaches, there can be various variations in futsal matches. This is because the speed of formation transfer in a futsal game is essential for a coach competing.

4. CONCLUSION

Based on the processed data, the results of this study conclude that there are 30 models of defensive tactics in futsal, and after testing, that the tactical model produced is viable and effective for usage in futsal. However, this research is limited in that it only develops models of defensive tactics and does not investigate the factors that influence the success of implementing these defensive tactics, such as physical strength and player coordination. Therefore, it is necessary to conduct additional research on the factors involved in implementing defensive tactics developed for futsal games

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