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ELEMENTARY GAMES IN FUNCTION OF SPEED REACTION DEVELOPMENT OF YOUNG MALE AND FEMALE TEAM HANDBALL PLAYERS

1. Introduction

Motivation and interest of young sportsmen for participation in sport activities is connected to attractiveness, popularity and tradition of a specific sport and specific contents used in the training process. Because of simply defined rules and concretely defined aim directionality, elementary games have important representation in contents of training process of young male and female team handball players. For young sportsmen the optimal development of wide spectre of basic motor abilities and their interconnectedness represent the basis for upgrading in specific and situational specialization manifesting in the game of team handball. (Gruić, et al., 2007). Development trends of handball game, regarding basic motor abilities, emphasize all segments of speed (speed reaction, singular movement speed, start and start acceleration, etc.).

Ability of fast reaction i.e. reactibility as a basic motor ability in the context of effectiveness in handball game should necessarily be seen in function of its manifestation during the performance of some technical elements in specific situations. Regarding the reaction ability, attacking activities in handball game imply: different shootings from the ground, passing the team mate in the best position, moving in dependence of the team mate (towards the ball or away from ball) etc. In the transition phase of the handball game i.e. after the goalkeepers defence or after take of the ball (permitted by the rules), reaction ability is manifested in making the player's position for fast break by player's revealing in space, which must be accompanied by passing of the ball by goalkeeper or team mate in time. Manifestation of reaction ability for a certain situation in defence phase is revealed in activities such as: deep coming up on attacker in time, intersecting the ball, passing between back court players, "closing" the pass to the pivot player, blocking the shots by defence jumping in block i.e. putting the hands in ball way to the goal, in the moment of shooting etc.

Fast reaction on a visual and sound signal represent the most applied contents in training process for development of reaction ability. In all phases (offence, defence, transition) of handball game reactions on visual signal (ball, opponent, team mate) are the most frequent.

Sound signal (referee decision) finds the connection with speed reaction in the transition segment of team handball game. The aim of one team is to take advantage in the sense of attack and score a goal, while at the same moment the aim of the team which transforms from attack to defence, is to stop the attacking team.

This paper presents the set of elementary games with the main focus on speed reaction regarding particular handball game segments.

2. Elementary games in function of speed reaction development of young male and female handball players

First set of games is characterised by performing the technical elements of handball game associated with attack activities of players such as: shooting from stand by position ("Let him shoot"), and fast, precise passing ("Throwing the ball against the wall", "Who is the fastest?").

a) "Let him/her shoot"

Participant number: 14-16 players (may be less then 14, but not less than 3) *Space*: half of the handball court

Props: handball ball

Time schedule: 5 min

Game description: Players are in the circle position with faces turned to the centre where the ball is. Each player has a different number. Players perform additional exercises to improve different motor abilities (repetitive strength, jumping type explosive strength, static strength). A coach calls a number, a player who is nicknamed has to run in the centre of the circle, take the ball and shoot other players. Intensity of the game may be increased by introducing more balls in the game.

Rules:

- *I*. according to handball rules, a player with the ball is permitted no more than three steps, and after that he must throw the ball,
- 2. each hit brings one point to the shutter,
- 3. each hit player gets a negative point

Winner: The winner is the player who collects the highest number of points in estimated time for game or the one who collects the default points first.

b) "Throwing the ball against the wall"

Participant number: 14-16 players

Space: wall and 10m of the court

Props: handball ball

Time schedule: 5 min

Game description: Players are divided in 4 columns. First player in each column is standing 4m away from the wall and he has the ball. At the starting signal, a player throws the ball into the wall, and runs backwards to the back of the column. The next player in the column, must catch the bouncing ball, and throw it back into the wall. This game mainly aims at improvement of speed reaction, but by introducing additional tasks it improves other abilities as well (accuracy-limiting the shooting space).

Game varieties can be defined by:

- difference in ball throwing (with both hands above the head, from the chest, changing hands, jumping)
- by marking the distance to which the players must run after throwing

- number of circles (how many times the players must change their positions in a column)

Rules:

- *1*. the bouncing ball must not fall
- 2. incorrect manners of throwing brings a negative point

Winner: The winner is the column which performs defined number of circles first and has less negative points.

c) "Who is the fastest?"

Participant number: 10 players

Space: handball court

Props: 2 handball ball, 20 floor markers

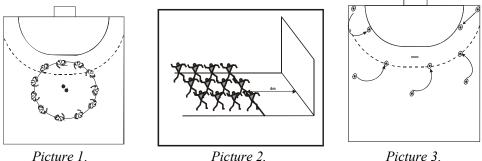
Time schedule: 5 min

Game description: Players are divided in two teams (5 players each) standing on their positions (left and right back, left, central and right back court players). The teams are facing the goal. In front of each player, there are two floor markers. The first marks the starting position (for backs it is the intersection of base and side line for back court players it is 11-12m from the goal), and the second is the place to which they have to move and throw the ball (backs 7m from the goal, 8,5-9m for the back court players). The aim is to move the ball from left to right back player obeying the defined rules. The game can be modified by introducing passing in another direction, shooting on the goal etc.

Rules:

- 1. the player is not allowed make more than three steps, and must throw the ball stepping next to the marker,
- 2. incorrect catching brings a negative point.

Winner: The winner is the team which finishes first obeying the defined rules.



Picture 1.Picture 2.Picture 3."Let him/her shoot"."Throwing the ball against the wall" "Who is the fastest?"

The other set of games are elementary games in which speed reaction is manifested in different defence activities e.g. goal keepers's speed reaction ("Buzz"), defence player movement speed ("Grasshopper"), blocking the shoots ("Blocking") a) "Buzz"

Participant number: 15 players Space: half of the handball court

Props: handball ball

Time schedule: 7-8 min

Game description: Players are divided in the groups of three. Each team has one ball. The groups are in a court (2mx4m). Two players are at the edge of the marked court and the third is in the middle. Two players are passing the ball, while the middle player is trying to get the ball.

Rules:

- 1. the middle player changes the position with the player throwing the ball at the moment in which he/she touches the ball with the body,
- 2. the middle player must attack the player with the ball,
- 3. false throwing is not allowed.

Winner: The game has no winner, but is played until the time is up.

b) "Grasshopper"

Participant number: pairs

Space: half of the handball court

Props: handball balls (according to pair number)

Game description: One player from the pair is jumping on the goal area line, while his partner is standing on the free throw line. At the starting signal, the player at the goal area line must run quickly and make a foul on his partner. The player, who is the first gets 5 points, second gets 3 points and last gets 1 point. After three repetitions, pairs change roles.

Winner: The winner is the player with the most points.

c) "Blocking"

Participant number: 15 players

Space: half of the handball court

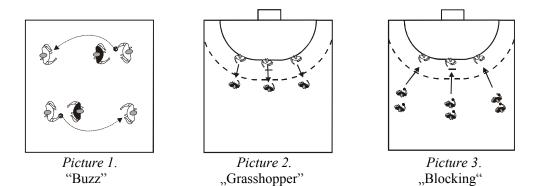
Props: 12 handball balls

Time schedule: 5 min

Game description: Players are divided in the groups of three. In the first circle one - group is the defence (three centre defence players in zone 6:0) and the other two are attacking (three back court players). The attacking groups shoot in defined order (from left to right back court attacker). The aim of the defence player is to block as many - shootings as they can. After all groups finish shooting, the defence team changes. *Rules:*

1. back court players must shoot jump shoot.

Winner: The group which has the largest number of blocked shoots and shoots out of the goal area is the winner.



The following games are primarily concerned with quick reaction aiming at ball transition from defence to attack formation ("Put the ball behind the line", "Quick counter-attack"), and individual solutions in transitional phase of attack and defence (-"Pairs fighting for the ball").

a) "Put the ball behind the line"

Participant number: 14-16 players

Space: half of the handball court

Props: 12 handball balls

Time schedule: 10 min

Game description: Players are divided in two teams, each in its half of the court. After the starting signal, players move freely in the court, and each defence player is in charge of one opponent player, by the principle of "pressing", offensing and half offensing model of individual system of defence. The task is to win the court by passing between the players (obeying the rules of handball) and get to the base line. By placing the ball behind the base line, the team gets a point. If the ball is placed inside the goalpost the team wins two points. If the ball is placed in the rest of the space behind the goalpost, the team wins one point.

Rules: The handball rules are applied with the following differences:

- there is no goalkeeper,
- the players move freely inside the goalkeeper's space,
- after the point is scored, the game continues from the base line,
- there is a special rule for placing the ball : the ball must be placed on the ground behind the base line (passing, rolling and bouncing the ball is not allowed)
 - the players inside the court can place the ball.

Winner: The winner is the team which scores the most points in the defined time or the team which scores the defined number of points first.

b) "Pairs fighting for the ball"

Participant number: pairs

Space: the handball court

Props: handball balls (according to pair number)

Time schedule: 5 min

Game description: The players are divided in pairs. Each pair has one ball. One pair - passes the ball to the coach in the middle of the court. The coach chooses where to throw the ball. The player who catches the ball is the attacker, and the other player is the defence player. The attacker wins the court by bouncing the ball using feints. The attacker's aim is to get in front of the goalkeeper's line and score a goal. The defence player is trying to stop him. The player who accomplishes the aim scores a point. *Winner:* The winner is the player who scores the most points in a defined number of repetitions.

c) "Quick counter-attack"

Participant number: pairs

Space: the handball court

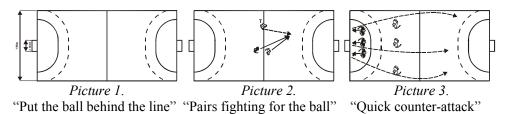
Props: handball balls (according to pair number))

Time schedule: 5 min

Game description: The game is played with no more than three pairs. One player from the pair is in the goalkeeper's area, and the other is in the same half of the court, 15m from the goal. The players in the goalkeeper's area place the ball on the base line. Their backs are turned to their partner and they perform frontal defence movement 4m away from the base line. Players without ball perform lateral side defence movements. All players start at the starting signal in the following way: the players without the ball reveal themselves in the court towards the goal. Players in the goalkeeper's area must pick the ball and pass the ball across the court to their partner who shoots. The players who score the goal first get 5 points; second 3 points and the last get 1 point. In one - circle, each player must take the role of a shooter as well as of the passer. *Rules*:

1. all actions against the rules of the game of handball bring negative points (double bouncing, carried ball, exiting from the goalkeeper's area with the ball).

Winner: The winner is the pair with most points scored after the defined number of circles.



3. Conclusion

Each motor ability has suitable period for its development (sensitive phase). In this context the described games can be applied in working with children in handball school (aged 9-10). This sensitive period means that the children are sensitive to sti-

muli targeting at the speed of reaction to sound and visual signals. (Hahn, 1986. in Milanović, 2004). The application of this type of games is also revealed in improvement of handball technique elements. Handball experts (coaches, teachers) who work with young players can benefit from this categorization of games and use them as the supplement for contemporary plans and programmes.

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Because of simply defined rules and concretely defined aim directionality, elementary games have important representation in contents of training process of young male and female team handball players. Development trends of handball game, regarding basic motor abilities, emphasise all segments of speed (speed reaction, singular movement speed, start and start acceleration). Team handball game effectiveness is significantly defined by basic reaction ability i.e. reactibility, therefore it is important to set it in the function of its manifestation during the performance of some technical elements in specific situations. This paper presents the set of elementary games with the main focus on speed reaction regarding particular handball game segments ("Let him shoot" "Throwing the ball against the wall", "Who is the fastest?", "Grasshopper", "Blocking", "Buzz", "Put the ball behind the line", "Pairs fighting for the ball", "Quick counter-attack", etc.).

Keywords: speed reaction, elementary game, young male and female handball players.