BALL GAMES

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1. EVOLVEMENT, INTERNATIONAL HISTORY, DEVELOPMENT OF HANDBALL

Before getting acquainted with practical technical-tactical basics of handball it is worth getting informed about the history of the sport itself. Roots of the formation of handball date back almost to the Prehistoric Times. On cave drawings having survived people throwing a stone or an object can often be seen. A primitive form of games played with hand could be discovered among ball games of Ancient Times. The games of "Urania" played by the Ancient Greeks (and described by Homer in the Odyssey) and "Harpaston" played by the Romans (and described by the Roman doctor Claudius Galenus in 130 to 200 A.D.) as well as in the "Fangballspiel" (or 'catch ball game') featured in the songs of the German lyrical poet Walther von der Vogelweide (1170-1230) all contained certain features that can be described as ancient forms of handball.

Present handball really started to develop in the New Age. At the end of the 19th century three games, considered as predecessor of our sport evolved almost at the same time: Haandboldm, Hazena and Torball. The basic idea of game haanbold is connected to Holger Nielsen, Danish school master, hazena, created by Václav Karas and Antonin Kristof was first played in Prague, torball evolved in Germany, the pioneer of which was Hermann Bachmann, who set the rules and made a detailed description of the game. The three games were played by different rules,
therefore organising large-scale tournaments was complicated. It became necessary to unify the rules, which was done by Karl Schelenz. The new game rules came into force in Berlin, in 1917. The sport’s international governing body was first formed in 1928 as the Federation Internationale Handball Amateur, and took its current name in Copenhagen, Denmark in 1946 as the International Handball Federation (IHF). The IHF’s first president was Avery Brundage - an American who went on to become president of the International Olympic Committee (IOC). The first Field Handball World Championships being played in Germany in 1938, following its appearance at the 1936 Berlin Games.

Handball game was very different from the present one at that time. 11 – 11 players played, free, on a football pitch. The period of field handball lasted as long as 1966. Indoor Handball firstly was invented in the 1940s in Denmark. This is a 7-a-side game, played on a court slightly larger than a basketball court with smaller goals than its outdoor counterpart. Again, this sport flourished in the Germanic nations where it was hoped that it would appeal to a wider audience. With rules from other sports like basketball being introduced, this made the game simpler to play and more exciting to watch. The fact that it became a winter sport added to the spectator appeal being away from the cold, seated in comfort, with more action and excitement and higher scores than soccer.

International Handball Federation (IHF) tried to make handball playable in a hall as well, that is how indoor handball evolved. Popularity of the game increased, development of its motion material got faster. Since 1966 world championships have only been organised on small fields and indoor. Indoor handball was involved in the Olympic programme in 1972, in the Munich games. In 1976, in the next Olympics, in Montreal also female teams got the possibility to compete. Olympic tournaments have become crucial events of the sports for both sexes. By the 1990s handball had grown to be one of the most popular sports. Besides the former dominance of European countries nowadays popularity of the game is steadily increasing in Asian, African, American and even Oceanian countries.

Having described the history of handball it can be seen that although the sport first evolved in Europe it has been developed into a world game. Handball is now played on every habitable continent on this planet. It is estimated that about 7 million players are registered with a club. Professional clubs in Asia (in South Korea, China and Japan) are becoming established and are considered as very competitive on the international stage. Africa, Americas and Oceania (our region) mainly comprise of amateur clubs but are very enthusiastic.
2. **SHORT DESCRIPTION OF HANDBALL SPORT**

Handball is a team sport in which two teams of seven players each (six outfield players and a goalkeeper) pass a ball using their hands with the aim of throwing it into the goal of the other team. A standard match consists of two periods of 30 minutes, and the team that scores more goals wins.

A standard handball match in case of men and female teams (over 16) lasts 2x30 minutes with a 10 minute break in between. During the match there is a possibility to have 3x1 minute time-out, but the attacking team can only do it only one time in the last 5 minute. The team consists of maximum 16 players. Maximum 7 players can be present in the playing field at a time. The goalkeeper and the six main outfield players are situated at the following posts according to the attacking and defending positions:

- **Right Wing**: He is situated on the right side of his field. He is usually a smaller and faster player among handballers. It is advantageous if he is a left-handed player enlarging this way the angle of the shot.

- **Right Back**: He is a tall player with big shooting power. His task is to shoot for goal above and between the defenders. Left-handedness is an advantage also at this post.

- **Center Back**: This is a player in the inner area. His main task is to organise, to lead the game mentally and practically and to complete the activity according to the situations.
**Left Back:** His task is similar to that of the Right Back, but here being right-handed is preferred.

**Left Wing:** His task is similar to that of the Right Wing, but being right-handed is preferred at this side.

**Pivot:** He is situated in the defence wall of the opponents, in a position according to the game. He is usually a heavier built player.

**Goalkeeper** - Position whose role is to prevent the ball from entering the net; this player is the only one allowed to touch the ball with feet.

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**Picture 3:** the rules of handball

The **rules of handball** are unified, regulated and controlled by the chief international organization, International Handball Federation (IHF). This task is fulfilled by the national organizations in the different countries, in Hungary it is Hungarian Handball Association. The most important rules are highlighted, but not detailed in the book, they are available at the following link:


The rules concerning the playfield are the following. It is regulated that the pitch is a 40 meter long and 20 m wide rectangular area consisting of a court and two goal areas. All the lines of the court belong to the area which they border. Lines of the handball pitch are of 5 cms, excepted the goal line which is thicker accordingly with the goal – 8 cms – and butts in the coat (IHF, 2015).
The most important lines are as follows:

* **Outer goal line**: 20 meters long
* **Side line**: 40 meters long
**Centre line:** parallel with the outer goal lines and situated exactly in the middle of the court.

**Goal perimeter line (goal area line):** a 6 meter radius arc starting from the back, inner point of the goalpost, connected with a 3 meter straight line parallel with the goal line

**Free throw line:** similarly to the 6 meter line, it is a broken line painted 9 meters from the goalpost, the line parts are of 15 cms length.

**Goalkeeper line:**
It is a 15 cm long line, 4 meters from the back edge of the goal line, in its centre.

**Penalty shot line:** it is similar to the goalkeeper’s line, drawn 7 metres from the goal line and is 1 m long.

**Substitution line:** it is on one side of the side line, 4.5 m in both directions from the centre line, drawn with 15 cm broken line both in the court and outside the playing area, rectangular to the side line.

In the goal area only the goalkeeper is allowed to stay. It is an offence if a player enters this area. It is considered entering if an outfield player touches the goal crease, including the goal perimeter with any part of their body. The ball in the goal perimeter belongs to the goalkeeper.

During the play it is permitted to catch, stop, throw, push or hit the ball with hand, arm, head, body, thigh or knee.

*Picture 5:* rules of defending players and goalkeeper
Another important rule is that the ball may be owned for a maximum of 3 seconds even if it is on the ground. Maximum 3 steps may be taken without bouncing the ball. The rules fix the norms of behaviour, offences and infringements.

**Allowed**

a) to use the arms and hands to block or own the ball,

b) the take the ball with open hand from any direction from the opponent player

c) to guard the opponent player with body having the ball or not

d) to have body contact with the attacking player from the front, with bent armes, to control him and follow him

**Not allowed**

a) to pull or hit the ball out of the hands of the opponent player,

b) to block or push the opponent player with arm, hand or foot,

c) to embrace, catch, push, run into the opponent player,

d) to interfere with, block or endanger the opponent player in any other way.

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**Picture 6.: rules of attacking players**
3. MOTION MATERIAL OF HANDBALL

The motion material is divided in several ways by several authors (Madarász, 1970; Csillag és mtsai, 1992; Marcinka, 1993; Fekete, 2007 és 2008, Juhász, 2013). In this chapter motion material of handball is given by the classification of Juhász (2013).

Technical elements of handball are classified as follows in this book:

![Diagram showing technical elements of handball](image)

**Figure 1.** technical elements of handball

### 3.1. Technical elements of defense

Technical elements of defense are the following:

- **basic position**
- **motion in basic position**
- **collisions**
- **activities to get the ball**: intercepting or hitting the ball
- **hindering the goal**: blocking,
- **defence against blocks**: over-slipping, rounding, changing directions
Figure 2.: technical elements of defence
Basic position

It is a dynamic ready-to-start position, characteristic mostly of the movement of the defenders, since the body position must be kept, however, the game situation must be responded on. Therefore you must stand bestridden wider than the width of shoulder, feet are on the floor, the knees are slightly bent, the trunk leant forward. The arms are slightly bent lifted by the elbow to the side to the hight of the shoulder or hip. Palms look forward.

Motion is basic position

Here the activity of the defending player is meant when the player tries to take a place on the court to be able to get involved in the play in the most optimal way both in space and time. The way of position is determined by

- the position of the ball,
- the position of the opponent,
- the position of the team mates,
- the current situation on the court.

The defender mostly follows the ball with his movement, possibly always keeping an eye on it while paying attention to the opponent. The defender may be, according to the position of the ball,
- between his own goal and the ball,
- between the ball and the opponent,
- in a special way.

**Collision**

The aim of collision is to stop the opponent, to delay his movement, passes, to prevent continuous attack activity, to hinder creating goal situations. Collision can be performed with a player moving on the ground, jumping up, against an attacker with or without a ball. Collision techniques are influenced by the defence positions and game situations. In case of a classical collision the defender steps out in cross stride against the attacker in shooting position. Coming from the character of the game body contact between the defenders and attackers is necessary and unavoidable. The attackers try to utilize their body power when breaking to the goal as well to create the most possible favourable shooting position, while the defenders put their body in the way of the attacker to block the way physically thus trying to hinder the opponent from going on with his attacking activity and getting into goal position. The outcome of these minor fights and battles thoroughly influence the outcome of the game. Collision is a dynamic contact of the body and limbs of the attacker and defender in the way permitted by the rules. Although the techniques appear in several ways during the game, the basic form of collision is the game situation when the players meet face-to-face on the **ground** and in the **air**.

**Picture 9:** collision
Activities to obtain the ball

Stealing and hitting the ball

Stealing is an activity to obtain the pass of the opponent performed individually or with mates. The defender watching the intent of the attacker calculates the expected direction of the pass and the supposed place of the ball. The stealing defender crosses the way of the ball with his movement, being placed near the catching player, because this way he can start later, since if he starts too early, the passing player may change his wish. If he catches the ball, he possesses it right away, if he can just touch the ball, runs after it very fast and takes possession of the ball the second time.

The other way to get the ball is to hit the ball. It is an individual defence technical element when the defender takes the ball from the opponent having the ball and hits is. It can be attempted in any game situation when the defender and the attacker are in a touch distance.

Hindering a goal

Blocking

Its aim is to stop the ball coming from a distance, going towards the goal. It is a basic task of the defender to cover the goal surface, as it is more effective to protect it.

It can happen individually or with mates (group blocking), naturally bigger number gives bigger guarantie to successful blocking. Blocking is usually performed with arms, rarely with body or thigh. Blocking can be performed on the ground or in the air. When blocking is in the air, it is important that the defender jumps up opposite the shooting hand and a little late compared to the attacker.

It can happen in active (he touches the ball) and passive (he does not touch the ball) way.

*Picture 10. group blocking

*Picture 11.: individual blocking
Defence against blocks

Blocks can be applied by the players while attacking all over the court, but this technical element becomes dominant near the goal perimeter line in the game against the set up defence.

Forms of defence against blocks:  - overslip
- bypass
- changing directions

Overslip is when the attackers have created a side-by-side block. The blocked defender can overcome it if he steps forward, out of the block and can follow the attacker by slipping over between his own mate and the one performing the block.

Bypass is applied by the defenders when the distance between the blocking attacking player and his mate is little, so there is no possibility to slip over. In this case the attacker steps back from the block and passes by both the opponent performing the blocking and and his person, that is his own mate and faces his new person this way.

Changing directions is the most frequently used tactical activity. The defenders follow the attackers as long as the defenders get next to each other. However, they do not follow the changes of the attacking players, but take over each other’s person. At the blocks it happens in the way that the blocked defender gets out of the block by stepping back and takes over the guarding of the blocking attacker while his mate follows the other attacker after the change.

3.2 Technical elements of offence

Technical elements of offence are as follows:

Technical elements without ball
- basic position of the offending player
- start, run, stop, jump up, landing
- feints (fake start, fake run movement)

Technical elements with ball
- possession of the ball (keeping and dribbling the ball)
- passing the ball (with one- or two hands, overarm- and underarm shot, on the ground or in the air, standing still or in motion)
- taking, interception of the ball (in lower- or upper position, with one or two hands, standing still or in motion).
- faking with the ball (eg. start fake, fake run movement, feinting a pass- and a shot)
- blocks, blocking-breakaway
- techniques to gain a goal (shooting on goal, typical shooting techniques of players playing at different positions eg.: vertical jump shot, falling jump shot, bow-shaped shot, etc...)

Figure 3.: technical elements of offence
Technical elements without ball

Basic position of the offending player

The player tries to take action and intervene into the game according to the situation every time. It means a basic situation – and not a basic position – when the handball player must be in an active state ready to intervene in the game at any moment.

The player’s trunk is slightly leant forward, the knees are slightly bent, the hands are at the side or breast height. He does ever-positioning movements to ensure the continuous intervention possibility, accordingly with the game. It means he always does positioning motions doing them in very small steps to ensure the active, stand-by state.

Start, run, stop, jump up, landing

Start: When starting the trunk is increasingly lent forward. The centre of gravity in low position helps the player to change positions. The first steps of start are short. The arms also help with starting, but they must be prepared to catch the ball, therefore, if necessary, the trunk turns towards the ball.

Run: Running movement of a handball player is much the same as natural running movement. The difference is that the flying phase of the run is smaller and the knees do not get high and the lower part of the leg does not flip either like it does in athletics.

Stop: In case of running fast the handballer must stop in the shortest possible time and distance, as the continuously changing game situations and the time of intervening in it is of utmost importance as for the result.

Jump: In the game catching the ball, shooting at the goal and passes can be done in the air as well. The players perform a lot of jump-ups which can be done from one or both feet as well. The majority of shooting at the goal is performed from jump up usually from the leg opposite the shooting hand.

Landing: An important requirement of landing is that the player lands is a well-balanced position so that he can intervene in the play immediately. Landing can be on one or both feet. Landing starts with the front part of the sole, then the whole sole touches the ground. The motion is over when the ankle and the knee gets in position as well. Bending the joints, the post releasing movements, the muscles working opposite the forces all serve slowing down the body. Landing is not always performed on the leg. It happens, that the player having lost balance in the air gets on the ground in the way to avoid injury, that is falling or rolling.
**Falls, rolls**

These landing techniques can be the final phases of various ways of shooting, but they may also be results of bumps or faults. Getting to the ground may be by smothering, rolling or slipping.

**Smothering**

This way of getting to the ground is the most often applied at leaning and jumping-in shots. The player closes both of his arms shoulder-width in front of his body in the air yet, then, when landing the palm gets to the ground first almost at the same time as the foot, the arms leant in the elbow, then in the wrist smother the fall, then the body also gets to the ground slowly. The player gets to lying on his belly through a push-up, the fall is slowed down by the wrist-, elbow- and shoulder joints. By holding the head back can be avoided the chin bumping in the ground.

**Rolls**

Rolls are mostly applied when landing in a lost balance position. When getting to the ground a whole roll is performed around the width or longitudinal axis.

Rolls over the width axis are usually applied by the wings after lob shots. After shot first the foot, then the leg, the outer part of the thigh, the bottom gets to the ground, then by rolling over the back crosswise over his shoulder he faces the ground again.

Rolling out is meant when rolling around the longitudinal axis, following in-jump or in-throw shots. After having shot the ball the body follows the movement of the throwing arm and makes a twist around the longitudinal axis. The player first does smothering, but the steady position is only for a second due to the big velocity, he gradually bends his arm in the direction of the motion and lets the weigh of his trunk roll over
his shoulder, his back and rolling over his other side he gets to the ground by lying on his belly. When on his belly he slightly opens his legs to halt the roll.

**Overslipping**

At this way of getting to the ground following a shot there is no rolling around either of the axises, but the arm motion described at smothering starts landing, then the chest gets to the ground, and since the velocity is big, landing is followed by slipping on it. After the chest has landed the two arms do pulling-, then pushing backward motion so that the body has energy to slip on his belly further on. Halt is resulted from energy loss coming from friction. Slipping out can be performed on the back or on the side.

![Picture 13: overslipping](image)

**Feints (feinting a start, fake run movement)**

Different ways of feints are used, they function as offence and defence techical elements, applied to mislead the opponent, so motions, movements different from his real wish are performed by the player. Based on the anticipation of the defender, his movement to the opposite direction, his advantage at calculating is manifested in action. A feint is good if it results in a bad reaction of the defender. A common feature of all faking technics is that they are connected to some kind of change in direction which the trunk and the limbs take different part in, with or without the ball.
Feints performed without the ball:
- change in direction
- feinting a start

Feints performed with the ball:
- change in direction
- feinting a start
- feinting a pass
- feinting a shot

Feints can also be categorized by how difficult they are, this way there can be simple or complex feintss. Complex feints contain two simple feints of different directions.

Technical elements with the ball

Possession of the ball (holding and dribbling the ball)

The aim of **holding the ball** is to keep it in a safe way and to ensure smooth transit between the technical elements. Therefore the two most important aspects of holding the ball is safety and practicability. On the one hand the player must possess the ball in the way that the opponent cannot get it, on the other hand he must hold it in a position so that it fosters quick, unbroken start of the next series of movement. Accordingly with the situation the ball can be kept with one or two hands, in both cases in upper or lower position.

*Picture 14.: holding the ball*

In case of **one-hand hold** the little finger and the thumb press the ball, the other fingers „just” support, ensure. The ball must be held tight, as this is an important precondition of safe pass and power transmission.
Two-hand hold is the safest way of possessing the ball, applied mostly by beginners. For the sake of bigger defence the hands are on the two sides of the ball, in the way that the thumbs show to each other, creating an upturned „V” letter. The ball is mostly held loosely by the fingers, while the palm just touches it.
It is a mistake if the player keeps the ball only with the tip of his fingers, because it may not be disadvantageous when passing, but if he wants to shoot, a lot of energy is lost, since he cannot focus power into the volume-centre of the ball.
**Dribbling**
The role of dribbling is that the player – after having done 3 steps – can change place on the court while possessing the ball, however, attention must be paid not to violate the double start rule. When dribbling it is important that the player feels and does not watch the ball. It means he can go to any direction, can change directions and feint without looking at the ball. As for the distance from the ground there is low and deep dribbling. It is advisable to keep the ball away from the defender in order to be able to keep it, so handballers must be able to perform dribbling with either hand.

**Passing the ball**
It can happen with one or both hands, with lower or upper pass, on the ground or in midair, in place or in motion. Short preparation, long preparation, making lob.

**Passes**
Passes are basic building blocks of an attack, the simplest connection between two attacking players. These attack technical elements ensure organising attacks, creating positions and prepare the completion.

**One hand passes** have more variations concerning practicality, distance and speed, therefore they occur more often in a game.

**Both hand passes** are slower, less practical, so they can be used effectively just in certain game situations. The most important is **classical pass**. (see 17, picture)

Technical implementation of passes can be divided in four parts: **getting velocity**, which can be with cross steps, after-step, changing steps or in leap, 1 - 2 or 3 (running) steps or jump up. The second phase is **to get the ball ready for a throw** which can be in a short way by lifting the ball out, on little or big lob, but at certain techniques, just because of the fast pass, the ball is not lifted out at all (eg. lower pass). Lifting out and throwing the ball is usually
indicated if the ball must be transmitted to a long distance and with a strong shot. The third phase is **throwing motion**, which can be done by upper pass, lower pass, behind the body pass, wrist pass, dribbled pass, hitting the ball, pushing or pass with jump. The final phase is **after motion**.

The pass can be performed on the ground in cross stride by the support of the leg of the throwing hand, by the support of the leg opposite the throwing hand and from parallel feet position. Passes from jump can be performed with vertical jump or in-jump.

**Taking, catching the ball**

An important motion of the attacking activity of a player is to take the ball, the technical implementation of which has strong effect on the manifestation of further technical elements with ball. In case of improper implementation the player loses time, this way he may get to disadvantageous position, may even lose the ball. Thanks to a sure take-over the attacker may get to a more favourable position. If the attacker possesses the ball with right technique, based on his skills he can take every opportunity.

Catching the arriving ball (dribbling the ball) is a precondition of a successful attack and score. It is advisable to distinguish one hand and two hand catch and techniques of catching balls arriving from different directions and heights and taking different paths.

![Picture 18.: lower both hand catch](image)

It is more difficult **to catch the ball with one hand**, because it needs more thorough
coordination skills. The ball can be caught with two hands as well. When catching balls arriving at head height with two hands the two palms and the fingers from „a little basket”, the open side of which faces the arriving ball. The high ball arriving at above the head, is waited by the player raised his arms high, the ball lands in the „little basket” again. Low balls arriving at hip level or lower are waited by the player with his arm in frontal biased lower position, this way the „little basket” is formed by the hand is turning downward. At this time the little fingers are close to each other.

**Feints with a ball**

Ball feints:

- changing direction
- feinting a start
- feinting a pass
- feinting a shot

**Feinting a start**

The origin of the name of this feinting technique is that the attacker imitates a start into a direction by stepping out of the attacking basic situation with one leg or moving with both legs in motion. Depending on whether the attacker performs this misleading movement once or in different directions one after the other, simple or complex start feints can be distinguished. Feinting a start performed with one leg is identical with the one both on the side of the throwing hand and opposite the throwing hand, the simple start feint is easy to implement, yet an effective feinting technique.

**Ball feint** is basically implemented in the same way as without a ball, with some modifications. In the first part of faking, in case of a right-legged player at left leg step out the ball is in closed position in front of the attacker, usually in two hands (turning the shoulder opposite to the direction of the feint protects also the ball). In the second part (when running past the defender) the left shoulder gets to the front on the other side at the second, left legged step. This movement also protects the ball from the intervention of the opponent. Jump-in or jump-off can be performed from left leg (the feint is two steps), or from the leg on the side of the throwing hand (three steps). If it is necessary to bounce the ball (the player tries to get space), it is performed in the second step with his hand farther from the opponent, deep, in closed position.
Feinting a pass
Pass feints are applied by all the attacking players independent of the position, usually with one hand. The technique got its name that the player imitates a pass to one of his mates at one part of the throwing movement. This feint can be implemented at any one- or two hand passes, in basic position or in motion as well. Feinting a two hand pass is not so frequent during the game and their application is connected to a certain game situation. Therefore attention is paid to feinting one hand passes because they are much more common in the games. Implementation of the first part of the feint depends on how stabil the one hand ball possession of the player is. This way after starting the throwing movement he either keeps his throwing hand back or stops the ball by putting his other hand in front. He does not let the ball go, but puts it back to the starting position according to the further aim or passes it on with a quick wrist- or lower arm movement into the opposite direction. Feinting a pass is always a two-phase fake with a broken sequence of motions which is well performed if this momentary stop does not break the further activity of the player.

Feinting a shot
The essence of feinting a shot is that the attacking player tries to make the defender and the goalkeeper of the opponent believe that he will attempt to score at the goal. This way he takes the attention of the defenders, makes them do wider and deeper movement, bump, screen, then, in a given moment he changes his own movement. To achieve the desired effect when feinting a shot the player performs all the movements or just certain phases of a throw, always targeting at the goal. It is a more dynamic faking form, than feinting a pass and can only be applied in goal zone or goal situation.

Guarding, guarding-breakaway
A technical element applied the most frequently by a pivotplayer. Guarding can happen near, in front of or behind the defender. Guarding is considered to be a technical element, but when discussing it, it is made clear that it is also an attacking tactical method in pair since there is a cooperation between two players. Its essence is that a player forms a „living barrier“ with his body blocking this way the defending motion, activity of the opponents. Depending on where the guarding player is positioned compared to the defender we can speak about front guard, side guard, basic guard situations and their mixed variations: front-side guarding and side-back guarding.
The importance of **frontal guarding** is represented in preparing cross-shot situations, as the guarding player holds up the depth movement (stepping out, forward – towards the field) of the guarded player. With this manoeuvre he provides a clear shooting position to the back, who can perform his cross-shot from jump (usually) undisturbed.

**Lateral guarding** helps in break-in situations, since with this technique the guarding player hinders the width (side) movement of the defender.

**Frontal-lateral guarding** prevents the defender from side and forward movements, **lateral-dorsal guarding** holds up the defender in moving to the side or back.

As for which part of the body is used in performing guarding we can speak about guarding in face, with back and from side. In case of **frontal guarding** the player uses his chest as guarding surface. Its advantage is that he can watch the movement of the defender all the time and he can apply big surface for hindering with his width axis. Its disadvantage is that it is difficult for him to get involved in the ball activities when getting on with the game, however, if he turns towards the ball from this guarding position, he usually losses even his guarding position.

**Guarding with the back** also provides big surface, and its advantage is that the guarding player can all the time observe the ball events. Its disadvantage is that he can follow the movement of the guarded player „only” through kinesthetic sensing of his back.

**Lateral guarding** is performed by the side of the player. Its advantage is that the guard can all the time follow the ball events and in case of catching the ball the hand farther from the defender can very well be used, contrary to situations when the guard waits for the ball with two hands. Its disadvantage is that body represents the least obstacle, so slipping or avoiding guarding is relatively easy.

**Guarding-breakaway**

Breakaway of a guarding player is departing the defender to get an advantageous situation, to gain a goal. It is a dual tactic element when the attacking double relies on the defender’s preactivity, so that from a prearranged cross shot situation after a pass a clear situation is created to the guard. This game situation is usually characteristic of the connection of a back and pivot.
Techniques of scoring a goal

There are several ways of shooting at the goal, e.g. typical ways of players playing at different posts, like vertical jump shot, stride jump shot, shot with a twist. Let us see the two most frequent ways of shot: Stride jump shot, and vertical jump shot:

**Stride Jump Shot** is the most frequent way of completing pure goal situations. In its basic way of implementation jump is performed from the leg opposite the shooting hand, which is rather a jump forward than upward, the player tries to get the farthest possible from the defenders. His jump is supported by swinging forward, up the knee on the same side as the throwing hand. The ball can be prepared for shooting in a long or short way. In midair, turning his trunk towards his shooting hand he waits a little, then shooting is started by the downward-backward spring movement of the swinging leg. It creates a pre-tensioned (arched) state, which helps in power transmission and gives proper power to shooting. The hip faces the direction of the shot, the passive shoulder moves back, while the shoulder with the ball swings forward. It is followed by the throwing movement of the arm and throwing the ball. Landing is on the jumping leg, the player slows down his velocity with a running movement.

**Vertical jump shot** is a specially distinguished technical element, since it is one of the most effective ways of shooting. Its technique is the following: gaining velocity, jump up, work in the air, shot, landing. Velocity can be gained by running steps, feints (feinting a start, feinting direction change) and skipping in. Phases with- and without ball can be distinguished. The most difficult way of vertical jump shot is **jump from one step.** The most frequent one is vertical jump **from two steps.** An attacker jumps **from three steps** when he is far from the goal or he has a possibility to complete the shot farther in width from the defender. In case of classical vertical jump shot jump is performed from the leg opposite the shooting hand.
The jump insures the vertical position for the shooter from which he can shoot successfully at the goal above or near the defender. The work of the jumping leg is much supported by the swinging leg, which means swinging the knee up or transversally forward-sidelong. Swing the knee can give impulse to the jump as long as the jumping leg is on the ground. The swinging knee is involved in the last phase of the jump and stops in the air, the thigh is horizontal. The ball is prepared at the same time as the knee is swung, which means the trunk is turned towards the throwing arm, which is connected to different possibilities of ball preparations, that is the movement of the ball. The arm opposite the shooting hand is swung forward-up in the jump phase to help the jump, then the player keeps it in front of him slightly bent until the upper deadlock of the jump.

**Preparation of the ball** can happen long in big arc, with lift-out in small arc and short straight. Preparation in big arc can only be possible in case velocity is gained in several steps and at those players whose palm is big, so he can hold the ball tight. When speeding up the ball on long arc there is the danger that it slips out of the hand of the player at the lower deadlock. The arc takes a whole circle, the end point of the preparation is the same as the end point of the upper throw. In case of small arc preparation the player must hurry to take the ball to a right throwing position in a right time. This sequence of movements is different from big arc in the way that here the arm is led not by the route of the ball, but by lifteing the elbow backward and upward. The twist of the trunk and the work of the passive arm is the same as in big arc. The essence of short preparation is that the player quickly lifts the ball held at chest height above the shoulder of the shooting arm at the shortest way.
3.3. Technical elements of the goal keeper

In handball the goal keeper has a prominent position. With his successful defenoses he has a basic duty meanwhile he is important in the attack as well mostly with his accurate launches. Technical elements used by goal keepers can be divided in two groups: technical elements in defense and in attack.

Technical elements of the defending activity of the goalkeeper:

- basic position, positioning
- defense of balls coming from different angles and distances
- defense in different situations (free throws, penalty)
- goal keeper on the play field

Attacking technical elements of the goal keeper:

- Starts/ Launches
- Goal keeper on the play field

Figure 4: technical elements of the goal keeper
**Technical elements of the defense movements**

**Basic position, positioning**

Basic position is a position that offers the goal keeper readiness from which he can defend or attack. Basic position is a big shoulder sized straddle facing the ball. Legs are bent a little bit in the knees and in ankles, the feet turn a bit outwards. The goal keeper puts his bodyweight on the first part of the feet to make sure to have the muscles ready to move quickly for defense. The trunk is bent a bit forward, both arms are on the sides of the trunk bent a bit also in the height of the shoulders. Hands are facing forward.

If we make an imaginary line from the present position of the ball towards the two goal-posts that is the range that needs to be defended. The two lines are closing an angle. To be a successful goal keeper he has to be in the middle of this angle range. During the attacks the enemy team plays the ball around. The goal keeper has to move to the sides to be always on this bisectrix. (Sideway positioning). At the same time goal keepers do not stand on the goal line but in front of it to cover a bigger area (depth positioning). Furthermore we can observe a height positioning as well the rate of the knee bending shows it for us. Sometimes the goal keeper is in higher position sometimes he is deeper before the defenses. It is up to the expected coming height of the ball. If the ball is coming from higher, the goal keeper is in higher position, if he expects the ball coming to their lower corners then the knees are bent and he can start the defense movement from deeper position.

**Defense of balls coming from different angles and distances**

The goalkeeper reacts differently to the balls coming from different areas. In case of across shots between the shooter and the handball goal there are defenders. Across shots mean far shots at the handball goals compared to other shooting forms (for example Jump-in shots). Across shots can be defended easier because they come from longer distance and the defenders help the goal keeper as well. (impacts, blocks). On the other hand it is harder to block because the preparation is not really visible or completely invisible from the team mates or from the opponent player (guarding) to the goal keeper. In some cases only a throwing arm or the ball gives information.

**Defense ways in different situations (for example free throw, penalty)**

Teamwork of the goalkeeper with the defenders (see: Blocking the score: Defense chapter) is one of the most basic parts. The number of the defenders (individual, group, team) defines the
size of the defensable area for the goalkeeper. The defenders have to cover the short corner of the handball goal, so that the ball cannot go between them. The goalkeeper must face the ball and if possible, he should not give up the short corner either. The longer corner is totally the responsibility of the goal keeper.

At penalties the goalkeeper can move a bit further than it is ordinary - maximum to the 4 meter line - and this is expedient because he can cover a bigger area to make difficult the penalty thrower's task. But this gives the opportunity to the penalty thrower to score from lob throw. The goalkeeper also can fake to confuse the shooter.

- The goalkeeper offers one side of the handball goal before the shot then during the shot he positions himself there.
- At the moment of the shot the goalkeeper moves his leg up high - so he offers a shot under the leg - then the leg goes back down to block and make the penalty unsuccessful.
- Before the shot the goalkeeper changes his position back and forth to make the completion more difficult.

**Goalkeeper on the field as a defender**

If the goalkeeper steps on the player field the same rules concern him as the other fieldplayers. While the goalkeeper is on the field he stops mostly the quick launches of the opponents by catching the ball. In case of false starts he can get the so called free ball. If he catches the quick launch he has to be careful because if he minimally touches a field player he can be immediately excluded from the game.

**Attacking technical elements of the goalkeeper**

**Launches**

This kind of pass is the best and safest way to position the starters quickly because it can be modified easily if the defenders organize back. The over pitch is a launched attack which is aimed at the running team mate in head level! The goalkeeper can use the lob form if the opponent is in the way of the pass and the starter has opportunity to run out. For shorter destinations the other ways of passes can be used (over- under- lean or jump passes) but skilled goalkeepers can start also from sitting position or from kneeing position to make a quick launch.

**Goalkeeper on the field**

Naturally the goalkeeper can assist to score a goal, so he can score a goal individually, too. In some cases the goalkeeper can be changed to a fieldplayer during the game. In this situation the fieldplayer wears identical shirt with the goalkeeper.
4. TACTICS

Tactics is all the ways of movements used against the opponent team. It is a behaviour which is used to reach the planned purpose, the use of the most succesful methods in situations and actions.

**Figure 5.: subdivision of tactics**

**Individual tactics**

Individual tactics is different according to the scope of duties (different posts) but there are tasks both in attack and in defense that are related to all the players.

**General Tasks**


R1,R2,BC, L2, L1  (5:1)

- positioning  - positioning
- preparation  - main tasks
- completion  - assistance of teammates
Group (part of the team) tactics

In defense group or part of the team tactics are used by the players who are close to each other or are in the same area so they can effectively help the defense. (for example forth attack-cover- close back, escort - pass -receiving etc.)

In attack group or part of the team tactics is the teamwork of the players who are close to each other (for example, parallel raid, changeovers, etc)

Playing against unsettled defense.

- Fast start (individual and group tactics)
- Overrun (team tactics)

Team tactics

In attack (in case of playing against ordered defense)

Attacking systems

- Positions system (place keeper game, based on creating weightpoints and maneuvering)
- Position changing system (based on place changes where the players continuously change their positions to open the defense line of the opponent team)
- Mixed attack system (combination of positions and position changing system)

In defense: (in case of ordered defense)

Defense systems (and line-up formations)

- Man catches/ block defense - all players are guarding which can be tight, loose, or it can be based on areas like whole or semi field as well as in front of the goal area.
- Area defense - all the players defend an area it can be 1, 2 or 3 rows deep (eg. 6:0, 5:1, 3:2:1)
- Mixed defense - combination of area and block defense systems (for example 5+1, 4+2 etc)
5. HANDBALL AS A FREETIME ACTIVITY

Handball has gone through many changes in the past decades which was analyzed in the historical overview. The competition sport is played only in sport halls but nowadays it is back in the outdoor life as well. There are new popular forms like the sponge-handball, beach handball and street handball.

**Sponge handball**

Ez a játék leginkább az általános iskolában, és az utánpótlás nevelés során U7, U8 és U9-es korosztályban jelenik meg. Speciális a pálya, és a felszereltsége, továbbá a labda, mely szivacsból készül innen az elnevezés is. Kevesebb a mezőnyjátékosok száma, hogy minél több lehessen a labdaérántés. A nagyobb korosztályokban fokozatosan növekszik a pálya mérete és a játékidő, valamint a szabályok bevezetése is folyamatosan sorra kerül.

This is played mostly in elementary schools and when they train the aftergrowth U7, U8 and U9 ages. This has a special field and equipment, furthermore the ball is made of sponge. The game has fewer field players so that there are more ball touches. Amongst older ages groups the size of the field is bigger and the game time is longer, as well as the rules are gradually introduced.

**Beach handball - sun and fun**

Beach handball is a summer kind of the competition sport. To play it is more fun. For example there is music played during the game and it is played even in rain. Nowadays it is essential part of beach parties. Beach handball is very spectacular because there are many acrobatic movements in it and with some goals the players can score 2 points which makes the game more interesting. With the special rules there is a more tense atmosphere. In beach handball there is less body to body contest. The game is more fair focused, the one who plays

*Picture 21.: way of shot in beach handball*
against the rules loses. Even though this sport has national and international championships, it still belongs to the alternative games. It is a big advantage that the teams can be made spontaneously and these teams enroll the competitions with fantasy names.

There is no need to have associations it is enough to have one certified player. However, beach handball events are more than just traditional summer competition sports. The sand eases the joints, makes the legs and stamina stronger. In the sand people can make spectacular movements and throws easier. These acrobatic elements, the spectacular "Chinese" shots and the fast changes of roles and players make this game very trendy.

![Picture 22: beach handball](image)

**Street handball**

As it has been mentioned handball can be played on different fields and as freetime activity as well. Street handball looks similar to traditional handball, yet it is not the same. The game has its own rules, the development was influenced by basketball. The point is the love of movement, good atmosphere and healthy lifestyle.

**6. SELF-CHECK QUESTIONS**

1. When did today's handball evolve?
2. What are essential preconditions, equipment for playing handball?
3. What are the basic rules of handball?
4. Which posts do you know in handball?
5. List 5 technical elements of offence! Describe them shortly!
6. Which kinds of handball as freedom activity do you know?
7. LITERATURE

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FOOTBALL

Imre Juhász
1. HISTORY OF FOOTBALL

Games related to kicking a ball were played in several countries throughout history. According to sports historians cuju or also known as tsu-küh (kick - ball) was a very primitive ball game of cultic nature played in China in the 2nd and 3rd millennium BC (picture 1).

In central Mexico, the Olmec played tlacstli with a solid caoutchouc ball. Harpastum, a game similar to rugby, was played in the Roman Empire, and it could be considered a distant ancestor of football. The Roman legions took a leather ball, an inflated bladder stuffed with hair on their conquering way.[1]

Several variations of ball games were pursued in medieval Europe, although the rules were different depending on the region. In the 1400s, a ball game named calcio was played in Florence according to specific rules on a fixed size field (Smith, 1977).

The foundations of the modern rules were drawn up in the middle of the 19th century when rugby and football were separated. The Cambridge Rules were put in writing in 1848 at the University of Cambridge, where the later system was developed in detail. During the 1850s,
lot of clubs did not have any connections with schools and universities, and various forms of football were played. Some of the clubs had their own set of rules. The most famous among them is the Sheffield Football Club founded by former high school students in October 1855 (Harvey, 2005). In 1862, John Charles Thring of Uppingham School established the influential set of rules [2].

These continuous attempts contributed to the foundation of the Football Association in 1863 (FA, the English Football Association), the first meeting of which was held in London, on 26 October, 1863 [3]. The International Football Association Board was founded in 1885 by the football association of England, Scotland, Wales and Northern-Ireland. The body alone is entitled to decide on possible changes to the rules.

The Fédération Internationale de Football Association (FIFA) was established on 21 May 1904 in Paris by delegates from 6 countries. The founders claimed that they would insist on the rules of association football, the Laws of the Game. International rise in the popularity of the game enabled FIFA to join the International Football Association Board. The four representatives from FIFA enjoy the same voting rights as the representatives from the UK’s four football associations [1].

2. CHARACTERISTIC FEATURES OF FOOTBALL

The game is played with 2 × 45 minutes, they called for half-time. The time spent not play (eg injury, replacement) of the judges at the end of the half as time off against overtime.

The game is the goal, that is, the ball used benefits to the opponent's goal. The goal then correct, if the ball has passed wholly over the goal line. The team will win the match, he scored more goals reached during the playing time. If the number of goals from both teams is equal to the match a draw.

Both teams have 11 players on the field at one time (if there is no issue), but it is possible to exchange. Official matches can be exchanged for three friendly matches between the two teams with the referee, in agreement with be the same as the number of replacement options. The player who replaced coach, he can not return to the track in that match (except the sparring).

The playing field can contain from 90 to 120 meters - divided into two equal-size halves - international game this size varies from 100 to 110 meters. The width of 45-90 meters, 64-75 meters in an international match. In the penalty area popularly called 16 it should be 16.5 meters from the base line and the goal line - this coincides with the two - and the penalty points is 11 meters. 9.15-meter radius of the starting circle and half circle before 16. The square in front of
the gate of 5.5 meters from the goal line ends. The baseline, sideline, goal line in the initial round, the round piece before 16, the "five and a half" and the penalty points are marked with

**Picture 24: The Field of Play**
white lime powder. The inner gate width of exactly 7.32 meters internal height of 2.44 meters. The corner flag height of 1.5 meters. The corners quarter-circle radius of 1 meter. The lines and goal posts to a maximum thickness of 0.12 meters (figure 1.).

FIFA (International Football Federation) and UEFA (UEFA) international game adopts a certified turf, artificial turf playing field. The artificial turf is mainly in the United States conquered, but the 1994 World Championship replaced the real grass with artificial turf play areas as well. Overcoming extreme weather conditions, the FIFA accept the artificial turf play fields (African countries, Russian territories). The stadiums are usually not covered, part of the auditorium-only, although there is also a fully indoor facility. The most modern stadiums under the playing field heating system built to help our winter is ready for play.

The most prestigious international football cup held every four years by the FIFA Football World Cup. Organized by the confederations qualifiers over 190 national team measures the strength of access together the final. The four-week finals tournament currently 32 national team (before 1998, 24) compete for the trophy. The last World Cup was held in Brazil in 2014, where he won the German national team.

Since 1900, the football can be found in the Olympic Games program, with the exception of the 1932 Los Angeles Games. Originally played by amateurs. Despite the fact that the 1984 summer games since the professional players can be named due to the limitations of the various countries have not sent their strongest team. Currently, the Olympic men's tournament is only 23 years of age can play a specific number of "over-age" side. As a result, the trophy is not much prestige and importance as the football World Cup. The women's football in 1996. Housed in the program, but without similar constraints to those of men.

Nowadays football is pursued both on amateur and professional level all over the world. Millions of people go to stadiums to watch their favourite team [4], while billions follow it on television [5]. According to a survey conducted by the FIFA in 2001, approximately 240 million people from 200 countries play football regularly [6]. The spread and the rise in the popularity of football is undoubtedly promoted by its simple rules and minimal equipment needs.

In many parts of the world it creates passions and plays an important role in the fans, local communities and throughout the life of the nation; therefore, it is often claimed that it is the world's most popular sport.
3. THE MOVES OF FOOTBALL

The movements of football are complex, the game elements rarely occur separately. The game elements or in other words technical elements are conceivable in themselves, and they can be practiced independently of the game. In order to perform and cooperate successfully, a football team must have technical knowledge, tactics directed towards the objective, and perfect physical condition. They are the three fundamental components of football: technique, tactics and fitness.

It is a basic requirement for the players to acquire the knowledge and movements of football. We follow the traditional division of technique and tactics just because of unified constructional principles. Acquisition of technical and tactical knowledge cannot be a separate and a sequent task, but it should be realized as an organic whole considering the technical and tactical activity (Göltl, 2002.).

3.1 Technical knowledge of football

Technique of football is the players’ appropriate and economical system of movements carried out during the game in order to perform successfully by observing the rules (Kristóf and colleagues, 1999).

Technique is a set of all the elements of moving. Football cannot be realized without the knowledge and use of technical elements (Kristóf and colleagues, 1999).
Figure 6.: Technical element of the Football

Subdivision of technique

The player’s movements without a ball

Footballers often change their position by running, while watching the ball, the opponents and their teammates. Footballers may also be forced to change their position in accordance with the information obtained about the conditions changing every minute.
Running moves in football consist of the same phases as in athletics running (swinging, pushing off, flying, landing), but there are some differences in their performance (pushing off, stride length, centre of gravity, etc.).

Quick start is an essential part of modern football. Out of two opponents in the same position the one will have an advantage who is able to start faster in order to solve a task or occupy a certain position (running to an empty territory, putting the opponent in an offside position, getting the ball, etc.) Start is performed well when it is quick, and the player reaches the required speed in the shortest time.

A form of breaking away from the opponent is a quick stop and a subsequent change of direction. It is a basic requirement that the stop should happen in the shortest possible time. It can only be reached by supporting the front leg on the ground with a strong pressure while the knee of the back leg lowers and the torso leans back. When supporting, the knees are bent and the body weight is put on the back leg.

During a match, the players often change the direction of their position because of the constantly changing situation. The change of direction should be performed by the minimum speed reduction in every direction.

Different tag games and slalom running (line and relay races by going round obstacles) are suitable forms to practice the change of direction. (Tóth, 2001).

Jumping up usually happens when a player gets or passes the ball. It can be performed with one or two legs from standing or running. The stages of athletics jumps (support, crouching, rolling over, swinging, pushing off) can also be found in football. In addition to proper jumping technique, calculation of the place and the time of jumping up, as well as the optimum use of physical strength are important factors. Before jumping up, the knees are bent lowering the centre of gravity to the ground.

It is an important requirement for the players to be able to equally perform the jumps by using either the right or the left leg with the same result.

Landing should be smooth with a safe centre of gravity. When landing, the front part of the sole touches the ground, and the impetus is reduced by bending and moving of the ankle and the joint of the knee.

The player can land on one leg or both legs. The latter is safer because of the bigger contacting surfaces. After jumps in running, it is more expedient that the player’s legs land at a different rate. Landing is ideal when the subsequent tasks (running, dribbling, tackling, further jumps) can be performed as soon as possible. Landing with stretched legs should be avoided, which can lead to injuries, and the player performs the subsequent moves with delay.
It often occurs that a player falls over after performing the technical elements or due to the opponent’s intervention because he fails to land in the proper balanced position. When a player falls over, it is important to play attention to a smooth landing. When the player’s balance becomes unsteady, the player takes a cross step in order that the bigger part of the body weight should be put on that leg. Arms stretched out and bent at the elbow play an important role in dulling falling over.

When the player touches the ground first not with his leg but with another part of the body, he should strive for rolling. If so, first the hand then the arm touches the ground, and they are followed by the other parts of the body (the leg, the thigh, the hip).

The dribbling player performs sudden, unpredictable movements to deceive the opponent. Starting and running dribbles are executed without a ball. The starting dribble is applied by the player before running movements to draw the opponent’s attention. After the dribble, the player goes on in the real direction. Primarily, the upper part of the body or a stepping out leg play a crucial role in the pretended movement. As for the running dribbles, this role is played by the movements performed during running: a change of pace and direction, a quick stop.

Relay and line races give an opportunity for the 6-10 year-old children to develop several technical elements without a ball, and also coordination of motion. Children should acquire two movements without a ball as soon as possible: positioning and defensive movements. Children should be aware of the initiative role of positioning to get rid of the opponent, which makes trapping and passing the ball possible. Defensive movements help the children to develop their ability to follow the opponent. The movements consist of running, running with post-steps, and a combination of turns. (Szalai, 1998).

Basic position and positioning are a part of the goalkeeper’s technique without a ball. Starting position plays an important role in the goalkeeper’s movements aiming at saving. In starting position the goalkeeper stands in a straddle position with (two feet width). The knees are bent and pushed forward in order that the body weight will be put on both soles. The upper part of the body leans forward, the arms are lifted to the side and bent at the elbow. Any kind of the goalkeeper’s movement can be started from this body position. During the match, the goalkeeper can change the position in the goal depending on the motion of the ball trying to occupy that part of the goal from where there is a good chance to save fast and successfully. The activity, during which the goalkeeper takes short post-steps trying to keep the body position described above, is called the goalkeeper’s positioning. The position of the goalkeeper is always determined by that of the ball. When the ball position changes, it involves a change in the position of the bisector and that of the goalkeeper as well. (Bicskei, 2010)
Moves of players with a ball

Since the basic requirement of football is the ability to deal with the ball, the moves performed with a ball-the proper and appropriate ball technique-have priority. A game is successful and enjoyable when the players are good at football technique.

Kicks

Kicking is the most common technical element. When carrying it out, the player passes the ball deliberately with a part of the foot in the chosen direction. Kicking can be carried out in different ways depending which part of the foot is used. Accordingly, kicks can be divided into the following types: push kicks, instep kicks, inner side of instep kicks, outstep kicks, outside kicks, toe kicks, other kicks (pictures 24-26.).
When carrying out any type, kicking consists of a chain of moves in which different stages can be distinguished:

- preparation
- swinging
- touching the ball
- final position

The first stage consists of run-up, touching the ball and swinging back of the kicking leg to generate momentum. Theses phases together make for a powerful shot. It is the passive form of kicking.

When swinging, the supporting foot is the planter one. The kicking leg swings forward quickly and forcefully from the final position, and it passes kicking force by making contact with the ball through the kicking surface. Kicking surface is the part of the foot which touches the ball at the moment of kicking. Since accuracy is the most important acquirement when kicking the ball, the position of the kicking surface related to the centre of the ball at the moment of touching, plays an important role in terms of driving the ball. The curve of the ball is significantly determined by hardness of the kicking surface, therefore the foot is tensed starting from the ankle. The position after kicking is called the final position. After contact with the ball, the kicking leg follows the ball in the direction of the shot for a while reducing speed, and lands in balanced position (picture 27.).

*Picture 27.* Movement series of the inner side of instep kicks
There are some physical laws behind different kinds of kicking. The momentum of the kicking foot accumulates energy which is transferred to the ball during kicking. The bigger the mass and velocity of the kicking foot, the bigger the velocity of the ball is. The mass of the kicking foot means a stretched leg tensed in the joints. The tensed kicking leg presses a part of the ball increasing its inner pressure. After the collision, the ball tries to take the original shape while travelling in another direction. Travelling and the change in the shape of the ball depends on the extent and the time of deformation.

In accordance with the law of action-reaction, the ball kicks back at the kicking foot in the opposite direction. If the foot is not tensed enough, the pressure on it will be bigger, the deformation of the ball will be smaller, and the energy loss effects the velocity of the ball negatively (Barfield, 1998).

The best way to achieve accuracy required in football is to use the inside of the foot because the contact area is relatively big and smooth (picture 28.).

This is a triangular area between the inner ankle, the heel bone and the big toe. The kick is mainly used for passing and goal shots. The inside-of-the-foot kick (push kick) can be learnt relatively soon and successfully, so the 6-10 year-old children are taught this type of kicking first (Magyar, 1986).

Picture 28.: Ferenc Puskás kicks the ball with the inside of the foot [3]
It can be executed either in a standing or a running position. Since the technique of both kicks are the same, it is not necessary to describe them separately. When executing, the supporting foot is positioned 15-20 cm to the side of the ball and the longitudinal axis of the foot is parallel with the direction of kicking. The kicking foot is turned out in the hip, the axis of the foot is at right angles to the target. The kicking leg swings back at an angle of 35-45 to the ground. The required power is provided by quick and energetic swinging in the hip. At the moment of kicking, the ankle and the knee are tensed, the upper body leans forward, and the arms are mainly used for balancing. After kicking, the kicking foot swings forward in front of the line of the supporting foot, and the player continues to move (picture 29.).

When executing a kick in a running position, the direction of running is the same as the intended direction of kicking. The distance of the run-up is approximately 3-4 meters. After running up, the next phase is performing the type of kicking described above.

The ‘instep’ is inner part of metatarsal bones between the big toe and the inside part of the ankle. The inside kick is very efficient to meet distance and accuracy requirements, and it is the most used kick among players.

The kicking movement starts with gaining momentum (5-8-meter run-up) at an angle of 45°. The last stride is longer, the supporting foot should be planted 20-30 cm from the ball. The move of the kicking foot in the hip is smaller than in push kick (side-foot kick), and the longitudinal axis of the foot is at an angle of 30 in relation to the direction of the ball. Swinging forward the kicking foot starts in the hip which followed by knee flexion. At ball contact, the ankle and the knee are flexed, the foot is pressed down, and the upper body leans backwards a bit.
In case of kicking the ball with the inner side of instep, the contact area extends from the big toe to the ankle curve. This kick works well for the longest shots. A strong kick is provided by the size and the hardness of the contact area. The ball can be passed only in a straight line. The distance of the run-up is 6-8 meters and its direction is the same as the intended ball flight direction. The last stride is longer, like a jump in. The kicking foot swings back and forward in the same plane. The knee is completely bent, the heel flies up. Swinging starts in the hip followed by knee flexion. After the kick, the kicking foot swings in the direction of kicking.

Outstep kick is performed with the part of the foot extending from the little toe to the outer side of the ankle. The contact area is big and relatively flat so it is favourable for straight and curved shots. Direction of run-up depends on whether the player wants to pass a straight or a curved ball. When kicking the ball after running up in a straight line, the ball spins. It goes straight when gaining momentum after a small bend. When the player runs in a straight line towards the ball, the foot is about 20 cm from the ball at the last stride. The placement of the foot is not parallel to the direction of the target but it turns a bit inside. When you run at a side angle towards the ball, the foot is approximately 30 cm from the ball. Swinging is generated by the hip while the foot is gradually turns inside and tensed. The foot impacts the ball. After touching the ball, the kicking leg keeps on swinging in a cross line. This is called follow through (picture 30.).

Other forms of kicks are rare, and they are mostly applied by players in the pressure of circumstances. These kicks include toe kicks, kicks with back heel, sole, knees.

**Trapping**

Trapping (receiving, bringing the ball out of the air) the ball as a technical element developed in that phase of history of the game when the use of hands were prohibited (1872). Players had to possess the moving ball by using other parts of
their body. Trapping a ball is the activity during which the player gets possession of the ball, and takes control of it in order to pass, dribble or make a pass into space, etc.

The main point of trapping is that the player puts an area of the body against the coming ball. The contact should not be stiff, so the movement is performed by drawing back the contacting part of the body to cushion the ball, take away its momentum, and prevent the ball from bouncing. Trapping the ball also called “topping” with an onomatopoetic word. Teaching and development ball handling skills are crucially important from the age of 10.

Trapping can be classified depending on the height of the arriving ball and the contacting part of the body. For space reasons, only the most important forms of trapping are described.

Trapping the ball with the inside of the foot is effective for stopping the ball that are flying straight. There are ways of trapping the ball with inside depending on how high the ball arrives (picture 31.).

When trapping a rolling ball, the supporting foot is slightly bent. The receiving leg is turned at the hip to the path of the ball and swings in front of the supporting foot. While the receiving leg swings forward, the upper body slightly leans back. When the ball contacts the relaxed ankle joints, the player draws the leg back more slowly than the speed of the arriving ball, and kills the ball’s momentum. The upper part of the body leans forward while the leg is drawn back and the player takes the pace off the ball.

Receiving lower and semi-high balls works similarly. The difference is that the player raises the receiving leg higher while by bending the knee a bit stronger. The speed of the ball is reduced by drawing back the leg in the hip and relaxing the ankle joints. As a result, the ball drops to the ground in front of the player.

![Picture 31.: Trapping with the inside of the foot](image-url)
When receiving the ball arriving from a high angle and bouncing up, the supporting leg is bent at the knee. The receiving leg swings back in the hip to the path of the ball, and the lower part of the leg is at about 45-degree to the ground. The ball bouncing up from the ground should contact the inner part of the foot slanted outwards. The strength and speed of the ball, reduces, deadens in the area between the ground and the lower part of the leg.

Receiving the ball with the inner side of instep is applied both for lower balls and balls arriving in the air from a high angle. It is also called an air-ball trap. The ball contacts the player in the air before it touches the ground. The advantages of the technique are that it decreases the possibility of being tackled, and the mistakes due to unevenness of the field can be avoided.

The foot follows the ball rapidly after contacting, which is an important moment of trapping the ball with the inner side of instep. The receiving leg is lifted to meet the ball while the knee is slightly bent. The body weight is placed on the toes of the supporting leg. Body weight is on the tiptoe of the supporting leg. The ball contacts the surface of the inner side of instep while moving the foot backward slightly- more slowly than the speed of the ball-on contact. The ball keeps contacting the surface of the inner side of instep during excellent trapping. Body weight is transferred from the tiptoe of the supporting leg to the full sole. The upper part of the body leans forward slightly while the arms maintain balance from the side. When receiving the ball from a lower angle, the foot does not need to be lifted high. In such cases following the ball and the breaking movement is shorter. Players, who have developed feel for the ball, contact the ball by letting the foot down from the ankle and swinging the leg forward in the hip.

Trapping the ball with outstep is used when there is no possibility for an inside of the foot receive or the player wants to execute a tricky move. Balance is established on the non-receiving foot with a bent knee and the upper part of the body moves into the path of the ball. The receiving foot is rotated inward at the ankle and kept flexed. The ball bouncing upward contacts the outside part of instep of the foot swung crosswise, and stops losing its energy. Then the foot is placed in the initial position and balance is shared on both legs.

The sole provides a safe trapping of a ball bouncing up in front of the player. The supporting foot is slightly bent at the knee and the receiving foot is lifted in the hip. The sole of the receiving foot is put in front of the ball so that it drops toward the ground losing energy and stops.

A chest receive is applied when heading is not possible, or it is required by the situation. The body is positioned in transversal straddling facing into the path of the oncoming ball. The knees are slightly flexed, the hip is pressed forward. The body slightly leans backward. When the body contacts the ball, the knees and the hip are suddenly pressed back, and the front foot is put next to the back one.
Simultaneously with pressing back the hip, the chest moves inward, and the ball travels down the player’s body to the ground. During this time the body is slightly bent in the hip, and the back is arched to deflect the ball towards the ground (picture 32.).

**Running with the ball**

In addition to kicking, running with the ball was one of the most important technical elements at the early stage of football, but it was overshadowed gradually. Despite the fact that speed, fast and accurate passing, as well as receiving the ball are considered to be essential requirements in modern football, running with the ball is still indispensable in some cases (goal attack, deception of the opponent). This technical element refers to any activity in which the player runs, drives the ball on the ground with a part of the foot. Especially, it is important in the individual play. Nowadays teaching beginners starts with practicing running with the ball, ball controlling, receiving and shooting. Experience shows that at the elementary stage 6-10 year-old children do not want to get rid of the ball, but they move it up and down the field.

When controlling the ball with the instep, the player pushes the ball with the inside part of the foot. Before contacting the ball, the foot driving the ball moves outward. The trunk leans forward a bit and turns in the direction of the supporting foot. During running, balance is maintained by movements of the arms. After controlling the ball, players watch their team-mates and the opponents by using peripheral vision. Running with the ball should be a smooth movement without losing momentum.

When running with the ball using outstep, the relaxed foot turns inwards from the ankle. The contact area provides safe moving of the ball forward. The technique may be followed by deceptive passes because the opponent is unable to deduce the direction of the pass from the position of the ankle.

*Picture 32.: Trapping with the chest*
When running the ball with inner side of instep, moving the ball forward is carried out with full instep of the tensed ankle. The contact area is relatively small and curved, consequently safety of controlling the ball decreases, so it is rarely applied. The position of the body and the arms are similar to other techniques described above (picture 33.).

**Picture 33.: Running with the ball.**

**Heading**

Heading is the activity during which the player passes the ball with his/her head. Presumably, the skill of heading the ball has been widely used since trapping the ball arriving in the air with hands was prohibited by the rules. The contact area is relatively smooth so making a pass is comparatively accurate. There are many opportunities for head contact with the ball during the game (heading on goal, passing, clearing, trapping). Headings can be grouped into categories based on the contact area, the player’s position and moving, and the direction of the ball (picture 34.).

**Picture 34.: Movement series of the heading.**
**Dribbling**

Dribbling refers to the moves applied in order to deceive, divert the opponent by using misleading movements. As a technical element, dribbling is effective if it is carried out in a persuasive way, and the opponent responds to it. Performing a dribble consists of two separable phases. In the first phase, the player performs pretended movements in order that the opponent can respond to them. In the second stage the player performs just the original movements. Dribbling with a ball requires complicated and complex movements. On top of deceiving the opponent by performing convincing moves, the player should possess and control the ball. Dribbling should not be autotelic. It may easily become dangerous because if it is unsuccessful, the player will lose control over the ball. Doing so within range by a defender, there could be a chance to score. There is a variety of dribbling techniques including individual characteristics. Since it is almost impossible to describe all of them, we will outline the most frequent dribbles with a ball.

**Tackling**

In soccer, tackling refers to the activity when taking the ball away from the opponent is performed according to the rules. Tackling started when players had already known running with the ball and dribbling techniques. It used to be applied just by defenders.

Building an attack on the entire field is a requirement in today’s football, so attackers are also supposed to acquire certain forms of defending and tackling techniques. Tackling requires skill, attention, aggressiveness. It should be executed with circumspection and resolution. Dribbling and tackling techniques are divided according to the player’s position compared to the opponent.

Taking advantage of body strength in the same position is not prohibited by the rules when it is aimed at playing the ball. Hitting the opponent shoulder-to-shoulder is possible when the two players are running next to each other. Pushing should be executed when the player’s body weight – who is running with the ball – is on his further leg. While pushing, the arm next to the opponent, should be pressed against the body.

Every player should be familiar with and execute basic tackling techniques which should be practised mainly in pairs. The games and playful exercises, described at dribbling, are suitable for improving the players’ tackling techniques. But the emphasis is placed on dribbling and possessing the ball.
**Throwing**

When the whole of the ball crosses the touch line either on the ground or in the air, the game should be restarted by throwing the ball back into play from the spot where the ball went out. The ball must be thrown with both hands, from behind the head, facing the field, both feet should be on the ground, and the player should stand off the field or on the touch line. Throw-in can be executed either from a standing or a running position.

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**Activity of the goalkeeper**

The goalkeeper is the member of the football team whose main job is to prevent the opposing team from scoring. To perform this special task, the rules give the goalkeeper the privilege to handle the ball in the penalty area. Goalkeepers were allowed to use their hands by modified rules – keeping in touch with development of soccer just here and there - first in 1871. The goalkeeper’s job is to stop and possess the ball by using a part of the body. Good goalkeepers should live up to a wide range of expectations including speed, flexibility, skillfulness, courage, calmness, attention, directing abilities (Bicskei, 2010).

The goalkeeper’s job with the ball can be divided according to the defensive and attacking position. Defensive activity is mainly aimed at catching the ball with hands safely. The technique of catching the ball depends on the height of the coming ball. On this basis, low, medium and high shots can be saved. Rolling balls are saved with parallel feet placed 10-15 cm from each other. The knees are stretched, arms are kept parallel, and fingertips brush the ground. The ball rolls up on the parallel arms, the goalkeeper stretches his trunk and presses the ball against the chest with the arms and palms. In a situation when there is no chance for the goalkeeper to catch the ball, punching or boxing should be used. Punching is usually executed by jumping up with one leg. Punching consists of the following movements: running-up, pushing off, flying, punching and landing. After pushing off, both arm swing upwards next to the body, the fists are placed and pressed together so that the inner knuckles can provide a flat hitting area.

*Picture 35: Gyula Grosics, the legendary ‘black panther’ dives [4].*
When there is no time for the goalkeeper to run from one side of the goal to the other, in case of close shots or headings, a diving save is performed. The goalkeeper pushes off the ground to catch or deflect the ball while flying in the air. Diving is a spectacular technical element (picture 33.) which requires courage and flexibility.

### 3.2 Strategy and tactics

In sports games including football as well, competing teams have immediate and distant objectives. The immediate aim of a football team is to win the match by scoring a goal. The distant goal is to do well in the championship. This goal is achieved by performing parts of the task during series of matches. Measures providing achievement of distant goals are called strategic knowledge. The concept of strategy: all activities used for realization of the basic idea. Strategy of football includes a wide range of knowledge. Strategy plays a crucial role in developing the structure of a football team. Strategic objectives are achieved through formation and tactics (figure 7.).

![Figure 7: subdivision of tactics](image_url)
**Formation and its development**

Formation is an arrangement of players on the field, which serves performing different tasks set in advance or in general. Formation itself does not provide the final objectives, just helps them. The system of formation does not help to handle different situations during the match. It is the task of tactics, which is the other component of strategy.

Development of formation is determined by the change in the rules, as well as the state of development of attacking and defending skills. The first elements of formation began to emerge when the players recognised and applied team play to score or prevent a goal. A part of the team attacked the opponent, while the other tried to prevent a goal.

Introduction of the rules in 1863 had a great effect on development of formation. First the formation consisted of a goalkeeper, a defender and nine attackers whose number decreased later.

Development of football was determined by four types of formation for a long time:

- The Pyramid system (1883, Cambridge)
- WM system with three defenders (1930, Arsenal), (Figure 4.)
- The Brazilian system, 4-2-4 (1958, the Brazilian national team)
- The 1-3-3-3 formation

The different formations are successful if the players have appropriate technical knowledge, tactical maturity, speed, physical fitness and endurance (Kristóf and colleagues, 1999).

**Picture 36:** The 'WM' formation (Kristóf et al)

**Tactics in general**

Tactics describes application of strategic knowledge and principles of football. Nowadays the concept of tactics refers to a planned play which makes the best of physical and psychic possibilities of the individual and the team. It considers the opponent’s fighting manner, strength, weakness, it adjusts to the rules, external and internal conditions of a match (Kristóf and colleagues, 1999). Each plan is worth as much is realized out of it.
During the match, the team play according to a plan accepted in advance in order to achieve the objectives. The common objective requires that each player join the teamwork. The play of the team is homogeneous if the activity of the eleven players is coordinated (Nagy, 1986).

Success is considerably determined by the unity of individual and team tactics. Tactics is divided according to individual and team activities considering attacking and defending as parts of the objectives. The knowledge of tactics which deals with guiding in general is called theoretical tactics, while applied tactics help to deal with situations emerging during the match (Kristóf and colleagues, 1999).

**Defensive tactics**

The objective of defending: to prevent a shot on goal, scoring a goal and get back the ball. Defending refers to neutralizing the opponent and preventing the opponent from playing or scoring. In modern football defending activity covers the whole field (Bacsó and colleagues, 1989). Defending activity is either individual or collective. When there is one player against the opponent or opponents, we speak about individual defence, which serves the interests of the team as well. Each player should know the principles of individual defensive tactics otherwise the team cannot benefit.

The point of individual tasks is determined by the whole of the teamwork. In WM formation, defensive playing was performed by seven defenders (three defenders, two halfbacks and two inside forwards). At an earlier stage of development, wingers and the striker were given defensive tasks as well while defenders performed some offensive tasks. In modern formations (4-3-3, 4-4-2 etc.) players are expected to perform collective offensive and defensive tasks. Defenders should be able to start a counter-attack immediately, and forwards should be able to perform defensive tasks too. Teams often defend with 9-10 players, and all of the players in defence try to launch a counter-attack. Basics of tactical-technical collective defensive strategies in certain defensive forms (man-to-man defence, zone or mixed defence, offside trap etc.) have different significance.

**Offensive tactics**

Development of football has always been promoted by improvement of the components of offensive play. The primary objective used to be scoring a goal, which was regarded as the immediate task by each player. That player succeeded who was able to run faster and kick the ball high and far. At the early stage, forwards, despite their high number (nine, seven, six),
could not succeed because their individual offensive playing—built on running with the ball and dribbling—was not effective.

Individual play was replaced by collective offensive tactics played by the Scottish and the English. In the Pyramid system (1883) the number of attackers and defenders was in balance already, and attacking was dominated by team play.

Deep-lying forwards imply a new stage in development of offensive tactics. Nowadays attackers should be completely aware of theoretical and practical requirements of continuous offensive play. Offensive tactics deal with questions how to deceive the opponent and score a goal. An attack is described as an activity when the team possesses the ball, and the preparations for the attack has already started during the defense. When the team takes possession of the ball, each player should think as an attacker (Bacsó és colleagues, 1989).

One or more players can take part in an attack, so there are two groups of attacking activity: individual and collective attacks. Nowadays attacking play is characterized by collective attacks because even if a player finishes the attack with a ball caught by him or herself, the teammates also take part in the attack by performing different movements of positioning to distract attention (Göltl, 2002).

The preparatory phase of the attack is executed by several players. In the final stage, the tactical possibilities are decreasing. The final moment of the attack is the shot on goal executed individually. Individual attacking is the activity when a player performs or finishes an attack (shot on goal after running with the ball, breaking into, passes on the run, etc.).

One or more players take part in collective attacks at the same time. In collective play, players often have to use individual methods too. Collective attacking technique does not mean pushing individual skills into the background, on the contrary, it makes their development possible. The objective of the attack—scoring a goal—can be realized by acquiring and applying technical basics.

Success of a collective attack is determined by such principles as fast execution, wide and deep-lying forwards, running into empty space, changing positions, improvisation.

A wall pass is when the player passes the ball back to the running player. Since this set of movements forms a triangle, two passes follow each other, it is also called a double pass. It can be used in the whole field but especially in the offensive area. The pass is effective against outnumbered defenders too.
4. FOOTBALL AS A FREETIME ACTIVITY

4.1. Futsal

The official futsal, especially the high rollers room played a version of football, which is controlled by FIFA. The name of the Portuguese futebol de Salãoból and the Spanish fútbol salaból comes from both means indoor football. Five Side was initially the name of the game, and later the English and the Spanish football sala (Hall) futsal words gave birth to the term (Kresta, 2009).

The Futsal is played between the teams, both teams four field players and a goalie is. The number of substitutions during the game up to 7 can be replaced with any number of times, but only at designated exchange zone. The playing field dimensions of a handball game-space, the edge of the playing field is in line to the west. The futsal ball size 4, but a complement to its special sponge layer and therefore less acne than used in football traditional ball. The game duration of 2 x 20 minutes, but in the pure play time is measured (or, where appropriate, the clock stops the timer, for example, if the ball goes out of play, it must be looked after, seven-night kicking, etc). Considering the dimensions of the playing field handball game similar space, the playing field is not bounded backboard, but also the line. The special futsal, called futsal ball is played. Its special feature is that the smaller size of the high rollers football labdától usual, however, greater weight - because it is lined with sponge - which is intended to be easier to use, do not snap to the player. The player sliding towards not allowed, but the ball went use with siding [7].

Picture 37.: futsal
FIFA organized the participation of 16 national team World Cup every four years. The UEFA Futsal European Championships for organizing, carrying eight European futsal national team will participate every other year. Today, about 100 countries cultivate this popular game [8].

4.2. The Beach Soccer

The beach football (in English: Beach soccer) is a variant of football (picture 15). The stand was originally football in South America, especially in countries formed a sand beach. Beach soccer Football is based on the foundations soon conquered the world, the game is great emphasis on agility, speed and good endurance [9]. The beach is loosely played football for decades, the rules of the oral tradition, built on consensus. The game-like organization demanded that the rules of the game uniform structure, are available for everyone. This happened in 1992 when the foundation of the Beach Soccer Worldwide. The first world championship was held in 1995, FIFA 2005 took over the redevelopment [10].

*Picture 38.: Beach soccer*
The track is 40 cm thick fine-grained loose sand, and 28 x 37 meters. Each team of 11 players can form, but can be four players on the field (three field players and a goalkeeper).

The 3 x 12 minutes of playing time. It operates two referees in a match. If a team is awarded a free kick in favor, they have to elrúgnia the player against whom the offense occurred. The keeper can not stop lined, so the ball is often immediately shot goal. Special rule that prohibited the use of shoes, ankle brace to wear at the same time allowed [11].

5. SELF-CHECK QUESTIONS

Which are the most important stages of the international history of football?
How can the movement material of football be divided?
Which are the football technical elements with ball?
How do we divide football tactical movements?
What is the “WM” formation?

6. READING

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**Online source**


**Online pictures source**

[1.] http://strollax.blogspot.hu/2012_04_01_archive.html


[15.] http://www.beachsoccer.com/events/bsww-miami-cup
1. HOW VOLLEYBALL EVOLVED AND DEVELOPED

Playing volleyball is a well-known, even one of the most popular branches of sports all over the world. This statement might seem bold, however, there are data proving that the International Volleyball Association (FIVB) has the most member associations; due to the Olympics since 2000 the audience interest both on the spot and via the media has been the most significant (including beach volleyball) in volleyball; while according to FIVB every sixth person in the world is concerned in indoor or beach volleyball either as a player or a viewer. Where did this constantly progressive ball game start from?

At the end of the 20th century, in North-America teachers of Physical Education Gulick and Wood created a new ball game in order to spend the long off-season time of sportsmen during winter. They lifted the tennis net up to head height and threw a basketball over it. The game was played in the whole room, without any limit in the number of players. It was allowed them to catch the ball, without its touching the floor. In 1895 William G. Morgan, the Headmaster of YMCA University in Holyoke had it played and called it ‘minonett’.

It was demonstrated to the public in 1896, in Springfield, that time it was called ‘volleyball’, i.e. ‘flying ball’. The new game soon became popular and started its world conquering way. Step by step it was necessary to set definite rules to the game (play-field, number of players, ball contact, net height, result scoring).
Volleyball spread first in America then in Asia, at the beginning of the 20th century. It was played in Europe during the years of the First World War, in England, France, Czechoslovakia, Poland and the Soviet Union. Soon associations were established one after the other, national championships were launched and international competitions were also arranged. There was demand for a central, coordinating body. Starting from the third of the last century the following events happened in the international history of playing volleyball:

— The Technical Committee for Volleyball was formed within the International Basketball Association in 1934 handling volleyball issues.

— In 1947 the International Volleyball Association (FIVB) was established. The French Paul Libaud was elected as its first president. Volleyball life started to renew, the following year the European championships started, then a year later world championships.

— 1964, Tokyo. The first time for volleyball as an Olympic branch of sport. (10 male and 6 female teams).

— 1984, Los Angeles. Ruben Acosta is elected as new President. He introduced a new, professional approach and strategy.

— The centenary of volleyball was celebrated in 1995 all over the world.

— In 1996 beach volleyball becomes part of the Olympic events in Atlanta.

— The millennium results in significant changes in the rules (rally, scoring, libero player, touching the ball with entire body).

— The President resigned in 2008 and gave the position to the Chinese Jinzhong Wei. He was followed by the Brazilian Ary Da Silva Graca Filho.

— On the opening match of the male world championship in Poland, 2014 there was a hit in the previous viewer record, as 62000 people wanted to see the match of the national team and the Serbians on the spot. Tickets were sold less than 100 minutes during the online sale.

Of course, there are nations in volleyball as well which do a lot for the professional development of the sport, which is reflected in their performance on world tournaments. As for men, Brazil, Russia (the former Soviet Union), Italy, Serbia, Poland, the Netherlands have been determining members of the world elite. The USA blue can also be listed here, the players of which are trained and strengthened in overseas tournaments. Concerning women, the USA has won several world competitions lately and similar power of the game can be observed in the case of Russian, Brazilian, Chinese, Japanese or Italian and Polish national players. The history of
volleyball can represent outstanding personalities as well. Karch Kiraly, playing in the Ameri-
can team with Hungarian roots was chosen the male player of the century by shared scoring (he
was the only one to become a world champion both in indoor and beach disciplines). We have
to mention the multiple-world champion Italian Lorenzo Bernardi, while for women the three-
time Olympic champion Regla Torres. The Brazilian Giba, the Italian Gianni, the Argentinian
Conte or the Serbian Grbics siblings also deserved their fame in male volleyball, as for female,
we have to mention the Brazilian Venturini, the American Misty May or the Chinese Lang Ping.

2. CHARACTERISTIC FEATURES OF VOLLEYBALL

Volleyball belongs to the group of ball games. However, it is interesting that the two teams
competing each other on the two equal-sized halves are separated by a net, which rules out the
body against body contact. The main aim of the game is to defeat the rival team’s half by the
ball, observing the rules. Both teams standing in front of each other can touch the ball up to
three times (individual players cannot touch the ball twice consecutively) before forwarding it
to the receiving team’s court. It is important that touches from blocking are not scored. Valid
scores are the following: when the ball is grounded on the opponent’s court, when either team
hits the ball out of the opponent’s court, when the opponent team receives a penalty or if the
ball is stuck in the net. Further features of the game are the following:

— The height of the net is set in advance, for adult men it is 243 cm, for women 224 cm.

— The play field is relatively small, 18x9 m, however, due to swift rallies high-level of
  locomotor and psychic abilities are required.

— The game happens in the air, the ball must not be grounded on the court. The number
  of ball contacts is limited (see above), yet the number of the ways of the ball within a
  rally can be unlimited. Each rally is scored.

— The way players handle the ball is defined, it has to be simultaneous and bouncing.

— Volleyball is basically played by the upper body but it is also standard to touch the ball
  with the whole body.

— Playing time is not limited. The best team has to win three sets. 25 points have to be
  reached during the set, in the final one 15. A set is won by the team which first scores
  25 points with a minimum lead of two points. In the case of a 24-24 tie, play is continued
  until a two point lead is achieved.

— The game starts with serving, in the moment of which players have to stand on the court
  in the appropriate order.
— Whenever the opposing team wins the right of service, players move one position clockwise, i.e. rotate.
— There are 6 players on one half. The team can have a so-called libero player, specialised in defensive skills.
— Players can ask for a limited number of breaks and substitutions in each set (Official Volleyball Rules 2015-2016, 2014).

There is a wide range of volleyball’s positive impact on personality. It is perfect to develop the community spirit, willpower, courage while it requires a very high level of mental and locomotor abilities.

In the rather complex material of volleyball’s movements we can distinguish forms of movements related to technical and tactical elements.

Technical elements can be divided into movements performed with or without the ball. Movements without the ball aim to establish the ball contacts as effectively, quickly and punctually, as possible. The basic positions of contacts can be listed here, and the approaches resulting in the necessary changes in positions when getting the ball in play. The appearance of the ball
technical elements was influenced greatly by the rule described above in this chapter according to which the ball cannot be caught or possessed any other way during the game. It can be played using bouncing hits lasting only for a few seconds. This condition called such contact forms into being as the two most common ones during the game: finger pad (overhead) and underhand contacts, hitting contacts (for spikes and when serving) and contacts in smaller numbers yet being inevitable (blocks, digs, tips).

The movements listed as tactical solutions service those popular and witty solutions which are presented during the team play, based on the conscious cooperation of players. They can influence the movement of the individual, the part of the team or the whole team. Due to the characteristics of volleyball the movements belonging to the tactical performance are in connection with two basic activities: defence and attack. (O’Hara, 2010).

*Picture 41.: Volleyball court*
3. TECHNICAL ELEMENTS OF PLAYING VOLLEYBALL

**Figure 8:** Technical elements in volleyball

3.1 Movement Techniques without the Ball

In modern volleyball game situations change vary rapidly. Players have to pay attention continuously, in order to intervene in the play if needed. It is very rare that there is no need for changing either place or position before performing a certain technical element. However, it is not advisable to separate the techniques without and with the ball too sternly. All in all, the most important is to provide the possibility of forwarding the ball in a tactic, precise and quick way, the base of which is the activity prior to ball contact.
**Basic position**

Straddling, with an optional leg a bit forward, knees and ankles bent, weight is divided evenly on the two legs. Trunk bends slightly forward, arms straight, bent from elbow, away from the body, looking forward. Different playing positions can require a little bit different basic position as well. There are different levels of the state of readiness depending on the knees bending. To begin serving and blocking is performed in high basic position, middle basic position is characteristic of preparing for hitting and setting, while low basic position is needed for defence or during blocking.

**Approach**

Starting from an appropriate basic position the player can perform a quick offset and from that a firm halt. The level of approach is defined by the speed and distance of the ball. Approach has to be made by the player contacting the ball, it can be either a change in place or position. Before getting a ball in play which arrives more slowly, it is possible to perform several movements for changing place (side hopping, steps across, running steps). When the ball arrives quickly and it is near, there is no time for that, the only thing the player can do is to change the position. During the approach the player’s look should follow the way of the ball and the hub has to do without vertical movements, parallel with the floor. The effort made to be in constant contact with the floor enables to react quickly to the sudden changes in directions.

*Picture 42.: Position of touching*
3.2 Technical Elements Performed with the Ball

Set technique (overhead pass)

It is one of the basic elements of playing volleyball, a structured form of movement. As it is not based on natural movements (throwing, kicking), it needs the appropriate methodological structure. It is used mostly as the second ball contact to prepare attack as this is the best way to forward the ball to the desired place. It can function when receiving services, for beginners when finishing attacks and as a tricky tactical attack element. It is inevitable for the setter but because it is so frequent, each player has to acquire it appropriately regardless their positions.

The most typical forms of overhead passes are the basic one, with a turn, backwards, side, jump set, that one performed with one hand, air set and others (tips, pulling, top spins).

During the technical execution of overhead technique it is important to use shoulder-length straddling, with one foot a bit forward, weight is evenly divided. Ankles and knees are moderately bent, trunk is loose, arms slightly bent in the elbow, lifted in front of the face. Fingers apart, wrist is strained back, the two hands form a ‘basket’. Thumbs and pointing fingers look towards each other, the difference between them is 5-6 cm. The ball must be touched with the finger pad, simultaneously and bouncing.

The stages of execution: approach, reaching and passing the ball, ball contact. Stretching knees and elbows is coordinated. During ball contact the wrist remains strained back. Due to changes in rules there is more and more focus on the simultaneous ball contact of the two hands, which can be concluded from the spinning of the ball.

At an advanced level of the game in the position of the setter the perfect execution is essential as setting the ball in the punctual direction, flight, speed and place is the condition of the successful attack. In today’s rapid game situations demanding more and more creativity, the top spin contact following the jump and the top spin contact back and sideward have a greater role.
Underhand technique

It is one of the basic ball contacts in volleyball, also a structured form of movement. Usually it is the first contact of the defending team, a typical technical element of receiving service and defence. It can be used as setting as well in case of incorrect scanning of the ball and it also functions as passing the ball to the opponent court. Its significance has risen due to the spread of float and jump services. It is key technical element and its precise execution determines the preparation possibilities in attacking. While top spin contact is the main way of touching the ball among setters, underhand contact is inevitable for players receiving service and those killing hits. The way of executing can vary according to the game situations. The direction and the speed of the ball approaching together with the bend and distance of passing are also significant. They influence the angle formed by the body and arms and the dynamics of foot work.

The perfect execution requires shoulder-length or bigger straddling, with an optional foot in the front, knees slightly bent. Trunk leans forward, back is convex, eyes directed forward. Weight is evenly divided on the two feet. Forming the contact surface: we put the upward palm into the palm of the more skilled hand then close the two thumbs in parallel so that they look forward. Wrist is strained, elbow is stretched. Lifting up shoulders the difference between underhand can be successfully reduced for men.

The forthcoming ball is passed by lowering the hub firmly, thus creating the surface to be contacted. Then we forward the ball in the necessary direction by stretching knees, lifting trunk and shoulders. The dynamics of how to stretch knees can determine the efficiency of forwarding.
the ball, while the angle of the arms determines the bend and direction of the approaching ball. There is a slight fling of arms.

At services and spikes it is inevitable to move as quickly as possible to meet the ball and take the basic position prior to underhand contact. To receive a high-speed and strong ball needs less bending of the knees and passing arm work compared to the slower ball which requires more dynamic knee work and stiffer arm position.

**Service techniques**

The service is one of the most important elements in volleyball, its first ball contact, the basic condition of the conception of the game itself. As a result of the rule of rotation each player has to know it, besides the libero player. The primary aim of the service at beginner level is to get the ball into the opponent team’s court following the rules. Later on it is also required to be able to direct services taking into account tactical aspects in order to make the attacking plans of the opponent team more difficult. At the most advanced level of playing volleyball the aim of the service is to get points directly, it functions here as the very first attacking contact. The efficiency of serving can be increased by its varied application of strength, type, direction or its bend.

Executing the service has changed a lot during the 120-year-old history of volleyball. Newer and newer techniques have appeared. There have been changes recently and most probably there are significant changes even today. Depending on the quality of the game the most popular types of service are the following: straight underhand, straight overhand (floater) and jump service.

![Picture 46: Float (overhand) service](image)

*Underhand* is one of the most popular service types. As it is relatively easy to receive, it is not used in competitive sport. For beginners it is reasonable in order to establish the concept of the game.
Its basic position is straddling, with the leg opposite the striking hand, knees slightly bent, trunk leans a bit forward. The ball is held by the player in the line of the striking hand, at the height of the hip, in the palm opposite the striking hand. The player to serve tosses the ball up to 30-40 cm while flings the striking hand and springs on knees firmly. With another spring the striking hand leans forward and the ball is hit on its back-low part by the strained hand. The movement can be extended by stepping forward with the leg on the side of the striking hand.

*Float (overhand) services* are more difficult to perform, they presuppose the appropriate level of locomotor abilities. Advanced players should perform them correctly. Their aim is to make the work of the player receiving the service more difficult, not to be able to receive the ball properly.

The basic position is bevelled straddling, knees slightly bent, the leg opposite the striking hand is in the front. The ball is in the hand opposite the opening arm at the height of the hip, the other hand is over the ball. Tossing the ball happens in the line of the striking hand, 1-1,5 m height in front of the shoulder line. Tossing is helped at beginners by bending the knees. Weight is put on the leg behind, trunk leans slightly forward. Striking hand is prepared bent in the elbow, heading the elbow front-side. Striking the ball starts with a dynamic bend of the knees, followed by straightening the trunk. Meanwhile the arm from the elbow flings forward, then the hand starting from the wrist lashes behind the ball as a whip. The striking surface is strained but the hand is slightly open in order to be able to direct. The set of movements can be finished by stepping front with the leg behind. The place where the player strikes the ball can be a difference in the technique. If it happens behind-over, the ball spins forward and if forceful enough, it can fall flying over the net. This is the reason together with the speed that it is difficult to receive it. If the ball is struck behind, in a central place then it does not spin but can float in the air, following an unpredictable flying pattern. Though float service is slower, the difficulty of receiving it is in its unexpected place of arrival.

The most modern *jump service* techniques were brought into life in order to shorten the flight of the ball, due to the effort to express more strength. The jump and the striking movement are even more dynamic than those of floating, very often of maximum strength. The aim of the float service is to perform a flat, short service. With the former one tossing the ball in the air happens by using one hand, with the latter one by two hands. Jump is performed by two legs in both cases.
Spike in volleyball is usually the third, i.e. the final attacking hit following setting. It is a dynamic, powerful and spectacular way of forwarding the ball.

‘Spike is the most efficient attacking method as teams can achieve almost 60% of the scores and 90% of rotations as a result of this hit. The spike can be executed with different arm movements. There are faster and slower pace hits. The ball can be spanned by the hit, mostly upwards to downwards or sideward, less frequently downward to upward. The hit can be directed right to the half of the opponent team, near the net or it is also possible to attack towards the base line of the court in a greater angle, which is a more conscious way of attacking. A real hitter possesses all of the technical methods listed above and is ready to use either hitting directions: the determined base line hitting or the sharp cross hitting, the one which is the most appropriate for the successful attack’. (Garamvölgyi, 1996).

The steps of the complex technique of the spike are the following:

— *Gaining momentum*: its aim is to reach the horizontal speed, approach the place of the spike then prepare the jump by bending the knees and swinging the arms into the back, bevelled position.

— During the *jump* the player has to transform the horizontal speed into vertical. If it is executed well, the place of the jump is a little bit behind the ball. Jumping happens by the energetic bend of the knees and swinging the arms dynamically forward and upwards.
— During the *float* as rising higher both arms swing until they reach the horizontal level where the arm opposite the striking hand is restrained and has a balancing role. The trunk leans slightly back, chasing.

— *Hitting the ball* starts with the forward movement of the trunk. It is followed by the lash-like movement of the shoulder, arms and hands. ‘At the moment of hitting the arm reaches out. The ball should be hit with a slightly open hand, reaching out as high as possible. The hand covers the top of the ball from wrist resulting in its spinning forward then reaching the floor. Finishing the hit the arm goes swinging on along the body, downwards.’ (*Kiss, Porubszky és Tarnawa, 1996*).

— Returning back on the floor after performing the steps of hitting should be executed as softly as possible, bending the joints of the knee and the ankle. To reduce the restraining power and the possibility of an inappropriate return it is advisable to execute this movement with two legs.

*Picture 48.: Technique of spikeing*
Technique of Blocking

The best and most efficient way against spikes is that of blocking. The rules enable its completed execution only for the players standing in the first row. Players jump right next to the net, swinging their hands up and forming a wall making the ball remain in the opponent team’s court. Blocking is the base and support of the defence strategy. The development of volleyball and the changes of the rules have significantly altered the role of blocking in the game. Defence is further strengthened that during blocking players are allowed to reach over the net provide the opponent player finished the attacking hit. The chance of the attack started from defence is helped as blocking is not included in ball contacts, thus the team can touch the ball three times besides it. There are active and passive ways of blocking. Concerning the players taking part in blocking, we can distinguish single and collective (double, triple) blocks.

Stages of the blocking technique:

— *Standby position*: It is a base position from which the blocker can react the most quickly to the attacking reactions of the opponent team. Shoulder-length straddling is required, knees are slightly bent, arms bent in the elbow, hands in front of the face, looking forward.

— *Approach* to the place of blocking happens mostly by sideward steps, in the case of shorter distance, while at greater distance players move by stepping across, less frequently running. In both cases the movement starts with the leg in the direction of heading while the hub moves on a linear way and the player remains opposite the net throughout the manoeuvre.

— Before the *jump* legs are close to each other, hub is lowered. Swinging the arm happens in front of the chest, the look follows the ball. The good jump is steadily upward, the player wants to reach the optimal position in order to execute the block as soon as possible. The factors of the successful execution are the proper timing and the jump near the net.

— The *block-wall* is the surface created by the blocker’s (or blockers’) closed under arm and hands put next to each other. Fingers are apart, increasing the size of the surface.
The difference between the arms and hands should be small so that the ball cannot pass there. At the moment of the contact it is important to cover the ball energetically with the wrist (during passive blocking the wrist leans backwards).

— During returning to the floor it is important to load both legs to avoid the injuries of the ankles (which are most likely to happen this stage) then create the possibility of taking part in the game as fast as possible by turning the trunk or lowering the hub.

**Defence touches – rolling, diving**

During the game it often happens that the player cannot get the ball into play by using the basic touches and there is not enough time for the proper approach. In such cases the very spectacular defence touches are used. The role of defence has become really important in today’s modern volleyball. Complex attacking combinations cannot be neutralised by blocking near the net and players have to apply defensive techniques. Some of the rules which have been changed over the past few years aim to help this defence: it is allowed to touch the ball with the entire body and to apply a special defensive player in the back row, the so-called ‘libero’.

To save a ball coming from medium or longer distance happens by rolling, especially with female players.

Its role is to support the game in a safe and quick way after getting the ball (reaching almost the ground) into play. Players can touch the ball with one hand, the palm being tense and forming spoon-shape.

Male players usually save the ball by diving. During this technique the player gets the ball into play by underhand or one hand almost floating in the air starting from a low hub position, reaching out the arm then arriving on the floor sliding on the chest. The return fall can be restrained by the arm sustained then the player can continue springing up.

*Picture 50.* Technique of diving
3. Tactics in Volleyball

The main aim of the game is to win, which can be achieved by the co-ordinated performance of the technical elements practised I advance and a co-operative team work. All this includes the tactical part of the game the main feature of which is purposefulness. Technical solutions and tactics are closely connected, they cannot be separated from each other. Their interaction is the key to progress. Lacking the minimum technical skills players cannot accomplish tactical ideas, yet using advanced-level tactics requires continuous improvement of their technical knowledge. Paying attention to gradualism beginners can experience the sense of achievement relatively early. For them understanding how to apply the appropriate technical solutions is to simplify the game. (Kenny and Gregory, 2006).

![Figure 9: Tactical elements of volleyball](image)

During playing volleyball players have to acquire a few basic correlations and possibilities according to the rules. One of them is related to team formation. In volleyball there is a fixed position for the players on the court at the moment of the service. It must be maintained during the match. As a result of rotation and the limited number of substitutes players continuously
change their positions. In theory it is required to play efficiently in each of the positions. For beginners each player stands on the place according to the rotation. At higher level of the game taking the advantage of change-overs can provide permanent positions for players in the given row. Being even more specialised can be increased by the libero player standing in the back. The team structure is determined basically by the proportion of setters and hitters and their related positions on the court. Players’ tactical and technical preparedness must also be taken into account.

The ways of how to line up on the court are closely related to team structure. It means the game can be structured as the following:

— **Setter and hitter in turns.** In this case there is not a constant setter. As a result of rotation the player arriving at position 3 prepares attacking. This is the simplest game structure as each player can try the role of the setter. Completing the attack happens from one of the angles. Beginners can acquire it easily, its drawback is in its simplicity.

Picture 51.: *Reception in 5:1 system – with rotation*
— *Two setters: 4:2-formation.* In this case two setters arrange the game lining up diagonally of each other. At the more simple version the first player in the first row set the ball from position 2 or three, if necessary, with a change-over in the row. For more trained teams the setter runs in from the back row next to the net between positions 2 and 3. In this case all the three lined-up players can be involved thus increasing the efficiency of the attack. The 4:2-formation can be used mixed as well which requires a lot of practice and co-operation to avoid the faults of maintaining positions.

— *One setter: 5:1-formation.* In today’s modern volleyball this is the most common line-up structure. The team consists of five hitters and a setter. If the player to prepare has to line up in the first row he or she has to play on position 2. If the player has to line up in the back row then after approaching or running in setting is executed from either position 2 or 3. Then the player goes on to defend to position 1. In this system the second touch is exclusively the task of the preparatory player from any part of the play field. During the games with one setter the formations of receiving service and change-overs adapt to the setter. The advantage of the 5:1-formation is that enables a more varied completion of attacking. The attention of the setter is not shared between the roles of setter and hitter so the player can concentrate entirely on the task. It requires regular practice and co-operation. Players have to pay attention to the proper line-up at the moment of the service touch.

Tactical solutions can be distinguished according to their more efficient support of attacking or defensive activity. In both cases we can talk about elements performed individually or in the team.

The tactic of the service is part of the individual tactic solutions of *attacking.* The aim of the service can change with the development of the technical skills, starting from the mere opening of the game till the possibility of getting a score.

The service has to be performed by all players according to the rule of rotation, i.e. in this context there is no specialisation (except for the libero player).

Tactical solutions in the services are the following:

— Appropriate timing. With the service it is possible to change the rhythm of the game. It can be accelerated or slowed down. Rules enable 8 seconds to execute the service after the whistle. It can be executed right after the signal if the opponent team apparently has not prepared for receiving it or with the purpose of speeding up our own game. We can
wait for longer within the given interval as long as the eight second supposing the opponent team pays less attention and we can slow down our own game because of certain tactical reasons as well.

— Appropriate transmission of strength. In today’s volleyball it is typical of both male and female players to use the jump top spin service. It is possible to transmit huge strength together with relatively exact manageability which can make the task of the players receiving the service really difficult. The danger of float services is mostly in their unpredictability of their place of arrival, not in their strength. Players can manage successfully a ball hit suddenly right behind the net, too.

— Directing the ball. Its significance is crucial as setting the ball to an empty place, to a player receiving less well or to a player committing faults consecutively can result in scores directly or can make the opponent team’s attacking more difficult.

— Influencing the ball’s trajectory. The ball spun forward hits the ground abruptly, the one spun backwards flies farther. If the ball is spun from the side it leaves its plane. When players use medium float services, the ball leaves its direction forward and backwards, to the right and left. The place of the hit cannot be predicted.

— Altering the ways of serving. Technically trained players know different ways of services and can alter them consecutively, creating an unexpected situation for the opponent team.

Setting tactics have a significant role concerning how successful the team is. The setter is the conductor of the team, very often being the captain of it as well. Although the activity of the setter is less spectacular compared to that of the hitter, they can contribute to the team’s efficiency with their playing well and punctual preparations. The setter is able to choose the best hitter, can avoid the players of the opponent team blocking well with the careful way of playing, can choose where and how to develop simple and more difficult attacks.

Obtaining direct scores can happen mostly following the spike as this technical element is the most frequent and efficient way of finishing the attack. Players of the first row can execute it within the attacking zone, while those in the back row do it from the back zone. In the situation created by the setter it is the hitter to choose and apply the solution resulting in the successful attack.

Though it is rather rare, the spike can be executed for the first contact as well when the setting of the opponent team is inappropriate and comes to the other court. This time the attack can be completed even without blocking. When receiving the service is setting as well, the
second contact can be the spike. It usually happens when the setter is forced to perform the first contact.

However, the spike is the third ball contact of the team in the case of proper defence and preparation. Well-trained players try to make the most of the faults of the opponent team in blocking and defence. Taking into account these facts the following happen very often:

- dynamic spike in a situation without blocking or to an empty place
- rotating of the spike next to the block
- hitting the edge of the block
- spike over the block, in the direction of an empty place

To apply team tactics in the attack is related to the level of the current game applied. With more trained setters and hitters the efficiency of the attack can be increased by the unpredictability of the preparation, which might derive from its place, rhythm and bend.

When the team is well-trained, the attacks can be executed by the combinative movement of several players. Its aim is to get a setter into play against whom the opponent team’s block cannot perform with maximum efficiency. Such combinative possibilities are keeping right or left, entering, following, slides. It needs the adequate amount of practising and the purposeful preparation contributing to the exploitation of unexpected situations.

In volleyball due to the quick changes in the game in one moment the team attacks, in the other one uses defensive techniques. It can be repeated several times during a set. The main aim of defence is to defeat the successfulness of the opponent team’s attack.

The base of the good defence is the player’s proper preparedness regarding the individual tactical elements of defence.

First of all, it is important to know the tactical basics of defence, i.e. those of the proper approach. It is also crucial to know well the starting position of the defence, consecutive following the ball with the look then approaching behind the ball to be got into play. In addition, players have to know the principles regarding the ball to be got into play between two players, the abilities of the team mates participating in defence and the characteristics of the team defence tactics.

Blocking is the most efficient defensive way against the spike of the opponent team. The player taking part in blocking has to know their own abilities and those of the attacker. Depending on the game situation the player has to apply the active or passive blocking technique in a conscious way.
The well-planned and coordinated defence of a team can influence efficiency even better than the well-functioning attacking tactics.

The first stage of the defensive technique is the reception of the service. With beginners all players are ready to get the arriving ball into play, except for the setter. At higher level as a result of the specialisation the number of receiving players might be reduced even to two. With the spread of jump service their number has increased again. The line-up of the team ready to receive the service is called service receiving formation. It has to be created in a way that the efficient reception could be followed by the successful attack-preparation. Receiving the service is punctual when the ball arrives at the designated setter in the proper bend near the net or directly over the level of the net. Inaccurate reception can reduce the efficiency of the attack significantly. Alterations of the rules can also strengthen the reception of the service, the typical example of which is the allowance of applying the libero player.

For the reception of the service there are a few typical formations. The simplest one is that of star-formation. It got its name after the form of the players standing in it. Five players can prepare for receiving the service in the formation of a ‘W’, the first middle player executes the preparation of the attack in position 3, near the net. Players in the left and right angles receive shorter services arriving sideward and prepare for the execution of the attack. The back middle player stands behind the attack line and most services are received by this player, as experience shows it. Players in the left and right corners try to receive the services arriving on a longer way backwards. With beginners in a game of 6:6 this is the most adequate approach.

At the next stage of the game similarly to that of the star-formation one player is withdrawn from receiving the service but the setter is not in the middle but rather in the right angle. The rest of the players are ready to receive the ball in the known ‘W’ formation. The attack can be completed from the middle or the angle opposite the setter.

Besides receiving the service the team has to prepare for defence, too. Its efficiency is supported by acquiring and practising defensive systems during which the complex way of blocking and its assurance have to be planned together with the protection of the back zone. Two systems can be used for this purpose:

— In the case of the corner defensive system the players in the first row either block or act out the role of the defensive player. According to the basic situation all the three stay next to the net ready for blocking. In the two angles there are two players to block while in the middle only the player in position 3 can perform it (however, side players can help as well). The player not taking part in the block defends stepping out. It is typical
of the system that player number 6 defends the territory behind the block with the 1 and 6 defending in the back. All of this is a simple defensive system to acquire easily even for beginners though it can be useful at higher level as well against a team which tips a lot.

— Backward defensive system differs from the former one that the place behind the block is protected by the player whose zone the blocking happened in. This player has to reach the territory behind the block very quickly. The task of player number 6 is to protect the back zone, i.e. the base line.

In playing volleyball assuring own attack is a unique team tactic task. As in most ball games if a team attacks, it does not have to defend. In volleyball it is different. Players have defensive roles even during the attack, namely protecting the attack itself, i.e. to ward off the ball ready to bounce from the block of the attacker team mate. If the team does not do it, the opponent team can easily get a point from defence. Following the service defence must always be protected (in case of unexpected balls) and when executing the spike.

Protecting the spike has a double protective task. On the one hand, the efficiency of the opponent team’s block can be reduced, on the other hand, we can give self-confidence to the player executing the spike. The hitter is more courageous to attack knowing that team mates behind are ready to receive the ball bouncing from the block. Protecting the spike is not only one player’s task but that of the whole team. In the first zone it is the setter and one of the back row players (depending on the game system) to cover the territory, while behind them the rest of the team does so in the form of a semi-circle. The movement of those taking part in the protection of the spike is always in the direction of the net, towards the block, in deep base position. Following the successful protection players have to prepare again for the own team attack.
4. VOLLEYBALL AS A FREETIME ACTIVITY

Playing volleyball is a great recreational activity. Today we have several varieties of the basic sport which offer great fun and active relaxation. The most popular of these is beach volleyball which began its world-conquering journey in the middle of the last century. By today it has become an individual Olympic sport having significant media interest and is played by crowds of people just for fun in lidos and on beaches.

Beach volleyball is officially played in sand, 2 players against 2. Deep sand can make the conditions more difficult for adults but it does not mean major reduction of the playing area: the original 9x9 metre half is reduced by 1 metre only. It also stands for the height of the net which is the same as at the hall volleyball. However, there are significant differences in the possible ways of touching the ball. Accordingly, “soft” touch cannot be used for playing and passing the ball which is coming from the opponent half, so in these cases the overhead pass and the tip touch are also prohibited. Moreover, overhead pass can only be used for setting if its technique is perfect, if the ball is touched by the fingers of both hands simultaneously, by this preventing sticking or the spinning of the ball in the air. Another difference is that the block is included in the three possible touches within one action, however, the blocker’s two consecutive ball touches are allowed. In games played with recreational purposes these rules can be neglected and the same applies for the number of players as well. This way one can often see beach volleyball matches played by a bigger number of players and with simplified rules in lidos, at seaside resorts and in courts of hotels which can make the game more enjoyable.
Besides the type played in sand other varieties are also known: the park volleyball which is played on grass fields, the water volleyball played in shallow water over a net and we can find asphalt fields as well. People can be indulged in their favourite sport in open air baths, beaches, parks and in football fields fit up with nets. The features of the activity aiming recreation naturally have an effect on the rules of the game. The number of the players in the two opponent teams is optional and so are the ratios as well, however it is worth considering the balance of power. In the competitive volleyball the quality of touches is determined (especially of the overhead pass and the upper tip touch), however in recreational circumstances it is reasonable to give favours in this field. Also, the size of the playing court and the height of the net can be modified according to the conditions.

5. COMPREHENSIVE QUESTIONS
Which are the most important stages of the international history of volleyball?
How can the movement material of volleyball be divided?
Which are the typical features of playing volleyball?
How would you describe volleyball concerning the main rules?
Which are the two basic ball contacts in volleyball and how can they be characterised?
What is typical of the 5:1-es game structure?
What is the difference between the corner and back defensive systems?
6. LITERATURE


Who is the All Time Greatest Volleyball Player from [http://www.topendsports.com/world/lists/greatest-all-time/volleyball.htm](http://www.topendsports.com/world/lists/greatest-all-time/volleyball.htm) (2015.07.10)

7. Pictures links

1. [https://www.google.hu/search?q=history+of+volleyball&biw=1366&bih=657&source=lnms&tbm=isch&sa=X&ved=0CAYQ_AUoAWoVChMI9viFydK4yALVgZ0sCh2dtgZ8#imgrc=GdFcPbKHB3nxEM%3A](https://www.google.hu/search?q=history+of+volleyball&biw=1366&bih=657&source=lnms&tbm=isch&sa=X&ved=0CAYQ_AUoAWoVChMI9viFydK4yALVgZ0sCh2dtgZ8#imgrc=GdFcPbKHB3nxEM%3A)
2. [https://www.google.hu/search?q=history+of+volleyball&biw=1366&bih=657&source=lnms&tbm=isch&sa=X&ved=0CAYQ_AUoAWoVChMI9viFydK4yALVgZ0sCh2dtgZ8#imgrc=OFn2Gbb_H9ZmaM%3A](https://www.google.hu/search?q=history+of+volleyball&biw=1366&bih=657&source=lnms&tbm=isch&sa=X&ved=0CAYQ_AUoAWoVChMI9viFydK4yALVgZ0sCh2dtgZ8#imgrc=OFn2Gbb_H9ZmaM%3A)
3. [http://www.slideshare.net/BSM_SLAB/volleyball-powerpoint-7048422](http://www.slideshare.net/BSM_SLAB/volleyball-powerpoint-7048422)
7. [http://ashbiomechanicalblog.blogspot.hu/2015_06_01_archive.html](http://ashbiomechanicalblog.blogspot.hu/2015_06_01_archive.html)
8. [http://volleyballcoaching101.com/?page_id=244](http://volleyballcoaching101.com/?page_id=244)
BASKETBALL

Péter Váczi
1. THE FOUNDATION, DEVELOPMENT AND INTERNATIONAL HISTORY OF BASKETBALL

Before we get more familiar with the technical, practical grounds of basketball, it is worth looking into its history first. Games that were similar to modern basketball existed already during the Maya, Aztecan and Olmec civilizations. The basketball known today was introduced by Dr. James A. Naismith, a sports teacher at Springfield YMCA College, Massachusetts, in 1891. Not only his goal was to introduce a sport that can be pursued during winter and indoors, but he wanted to arouse student’s interests as well. At first 13 major rules were created.

1. The ball may be thrown in any direction with one or both hands.
2. The ball may be batted in any direction with one or both hands, but never with the fist.
3. A player cannot run with the ball. The player must throw it from the spot on which he catches it, allowance to be made for a man running at good speed.
4. The ball must be held in or between the hands. The arms or body must not be used for holding it.
5. No shouldering, holding, pushing, striking or tripping in any way of an opponent. The first infringement of this rule by any person shall count as a foul; the second shall disqualify him until the next goal is made or, if there was evident intent to injure the person, for the whole of the game. No substitution shall be allowed.
6. A foul is striking at the ball with the fist, violations of Rules 3 and 4 and such as described in Rule 5.
7. If either side make three consecutive fouls it shall count as a goal for the opponents (consecutive means without the opponents in the meantime making a foul).
8. Goal shall be made when the ball is thrown or batted from the ground into the basket and stays there, providing those defending the goal do not touch or disturb the goal. If the ball rests on the edge and the opponents move the basket, it shall count as a goal.
9. When the ball goes out of bounds, it shall be thrown into the field and played by the first person touching it. In case of dispute the umpire shall throw it straight into the field. The thrower-in is allowed five seconds. If he holds it longer, it shall go to the opponent. If any side persists in delaying the game, the umpire shall call a foul on them.
10. The umpire shall be judge of the men and shall note the fouls and notify the referee when three consecutive fouls have been made. He shall have the power to disqualify men according to Rule 5.

11. The referee shall be the judge of the ball and decide when it is in play in bounds, to which side it belongs, and shall keep the time. He shall decide when a goal has been made and keep account of the goals with any other duties that are usually performed by a referee.

12. The time shall be two 15-minute halves with five minutes' rest between.

13. The side making the most goals in that time shall be declared the winners.

Out of the 13 rules 9 still applies today with minor changes. The very first game was held in a college gym where a peach basket (secured at the gallery) served as the score target. The peach target was later replaced by a ring, but the original height (3.05 meters) remained. The first match took place on 21st December, 1891. Basketball soon became very popular among students. The book containing the first set of rules appeared on 15th January in 1892. The fast growing popularity was also demonstrated by a match between two professional teams, Ymca Trenton and Ymca Brooklyn on November 7, 1896. All players that day received a 15 dollar payment, except for Fred Cooper, who was given 16 dollars and became the most well paid player. In 1898 with the participation of six teams the Ivy League was established. This was followed by the first University championships in 1901. It also appeared during the 1904 Summer Olympics in Saint Louis. During the very first international game the team of Saint Petersburg stood against the American Ymca. Basketball was first included in the official Olympic program in 1936, but this was preceded by the foundation of the Fiba, the International Basketball Federation. The forerunner league of the today known NBA was the BAA where the first game was held in 1946 and was fought between the teams of New York and Toronto.

The home of the first European Championship was Geneva in 1935, while the first world championship was hosted by Argentina in 1950. The end of discrimination among players was a crucial step in making basketball more popular.
Having no distinction between amateur and professional players enabled the best American players to attend the 1992 Barcelona Olympics.

Thus the well-known “Dream Team” of Michael Jordan, Magic Johnson and Larry Bird not only won the Olympics easily, but amazed the entire world as well. The present world of basketball is a lot more equal as quite many European teams managed to catch up with the team overseas. Today the International Basketball Federation counts members out of 215 countries, which indicates the popularity of basketball and also accounts for its long and captivating journey since 1991.

2. BRIEF DESCRIPTION OF BASKETBALL

Basketball is a type of ballgame that is played by two teams of five players. The objective is to score a goal that is to get the ball through a basket, while the goal of the defender team is to prevent this. The ring is 3.05 meters high regardless of gender. According to the international basketball rules the fixed size of the game field is 28X15m, while in the professional league of North America it is 29X15m. In case of games organized by Fiba
game time is restricted to 4X10 minutes, whereas in the NBA it is 4X12. Various age groups play with different sized balls. The size of the ball is also regulated; women play with a ball sized 6 (72. 4-73.7 cm in circumference), while men play with a ball sized 7 (74. 9-78.0 cm in circumference). Basketball is one of the most popular sports in the world today, and is also outstandingly suitable for educational purposes.

3. SYSTEM OF MOVES IN BASKETBALL

Within moves, two main types are distinguished: moves with and without the ball.

Technique usually refers to the movements that are carried out in different situations in the game field.

3.1. Moves without the ball

This category includes natural movements, such as running and its various types. Children should acquire these skills during warm up or in form of games. This enables them to master different direction changes, sudden stops, dribbles in a playful environment.

![Figure 10: tactics of basketball](image)
Picture 57.: The Official FIBA basketball court
Basic stance

Acquiring the fundamental (‘basketball’) position is crucial as it provides a steady balanced position. From this position a player is able to move into any direction fast. After ending a move a player needs to occupy the very same position. The zero setting itself is a side- or cross straddle. In case of a side straddle the two feet must be equal to the breadth of the shoulders. The ankle, the knee and the hip need to be in a slightly curved position, with the torso somewhat leaned forward. Head is raised, looking forward. Arms should be put the position accordingly in a slanting posture, palms facing up. Body weight is equally distributed on the legs. In case of a cross straddle one foot should be slightly out in front of the other. The hand above the front leg is at eye level, the elbow is bent, the palm looks ahead to prevent a throw or a pass. The other hand is in a side-slanling posture with the palms facing forward to make moving and carrying the ball harder (Bácsalmási and Bácsalmási, 2005; Mondoni, 1986).

Basic move

A player never occupies one rigid position, but is always in motion, in accordance with the game situation. In the base position this involves standing on the head of the inside feet and running still. If the move is done properly, it is very tiring.

Starting and stopping

Standing still in basketball is very rare. It rather involves fast offenses, stops, direction changes, hoops and descending. When making a first step, it is important that our leg face the direction we are moving into. Cross stepping is to be avoided. Starting an offense starts with
one quick step and increases gradually. Acceleration, however, is always subject to the proper base position. At the end of the run a player has to stop as quickly as possible. Stopping can happen in either one or in two rhythms. They are rather irrelevant in the case of off-ball movements; however, stopping with the ball in hand is only possible in either of these rhythms. Thus it is crucial that a player knows how to stop in two rhythms. This can be performed from a standing or from a moving position (Kristóf, 1999). Doing it properly requires bending the leg and lowering the centre of gravity when making the penultimate step. Then at the last step support it with the edge of the inside feet of the other leg. Speed running is a very good practice for it. The court lines provide an ideal place to exercise. Speed running also proves to be useful during warm up to practice the various stopping forms. It is important to practice it for both legs.

### Changing speed and direction while running

The running movement of a basketball player differs from that of the other sports. During the game the situation changes fast, which makes the players’ task extremely hard. The quick starts, short gallops and sudden jumps has changed traditional running movement. The centre of gravity of a basketball player is located lower and thus is ready for fast changes in direction all the time. It is important to emphasize the proper support, the lowering of the central gravity and the move towards a new direction. Before the change of direction we need to put weight on the leg that faces our new direction, lower the centre of gravity so that we can support with the other leg. Then we put weight on our supporting leg and take the first step.

### Jumping, landing

Jumping in right rhythm and time insures good offensive or defending movements: in defense it is useful in the arranging of arched passes, blocking a shooting guard, getting a rebound. In offense it helps in shooting baskets. Jumping can be either with one or two feet. Jumping with both feet is more common if we do a standing jump, and while moving we tend to use only one leg for jumping. The starting position of the jump is the same as the end position of the stopping. We gain momentum by stretching the ankle, the knee and the hip, and by swinging up the arms. In other sports landing is of no importance, but it is in basketball. A player always needs to land in a balanced position, possibly reach the ground with both feet and take the base position. Thus a player can re-join the game situation accordingly.
While moving it is more common to use only one foot for jumping, which does not differ from jumps of other sports, the difference is rather in landing. We can land with both feet or we can use only our jumping foot. In case of the latter, we still need put the other foot down as fast as possible so that we can re-join the game (Kristóf, 1999).

**Dribbling in starting and running position**

Dribbles are aimed to move the enemy out of its stable position, and taking advantage of this, the team can carry out its planned movement in the opposite direction. The proper support and the lowering of the centre of gravity are essential. This is followed by taking a step in the new direction. We can do this either by using the leg of support and do a cross-step, or using the other leg that faces the new direction. It is important to acquire both techniques, as they can be useful by all means. Similarly to other movements, players need to perform dribbles in both directions.

A dribble can be simple or complex. A simple dribble contains only one movement, while a complex one is based on series of simple dribbles.

A crucial factor in dribbling is that we leave time for our enemy to react. If we start the dribble too early, our opponents simply will not have enough time to react, and if it is too late, our intentions will be followed easily. Thus catching the right rhythm is the key. A player of good dribbling skills is capable of forcing his will on the enemy. Dribbling needs to be taught. We have to practice it first alone, then with the help of a defender (Kristóf, 1999).

*Have players practice dribbles in pairs, both in offensive and defender positions.*

We can perform dribble moves while running. We stop after a dynamic run and break away from our defender. Another possibility is if we gradually slow down and pretend to stop, forcing our enemy to move slower as well. Then with a sudden pace change, we speed up next to the defender.

*Defenders should also practice these tasks.*

Defenders can dribble as well. Moving towards the offensive players they can fake a jump and with a sudden step backwards they force the opponent to make a mistake. This could be a pass got from the opponent team, a forced pass, a forced shot, or forcing them to stop. For practice we can use the above mentioned exercises (Páder, 1968).
Basic stance in basketball. Moving the arms and feet in defense

Basic stance of basketball

We need a shoulder breadth or a little wider side-cross straddle. One foot is put half foot forwards and slightly turned in. It is best if we put the foot in the front which is identical with the hand holding the ball. The ankle and knee are slightly bent; the torso leaned forward from the hip. Head is raised, looking forward. Arms bent at the elbow in a slanting posture with the palms turning inwards.

Arm-and foot moves of the defense

In their own penalty area the basketball players usually defend by applying a retreat step. This is true for other parts of the court; defenders only change to running movements if they are unable to follow the opponents with retreat steps. The key in doing a retreat step is that at the moment of a sudden stop a player needs to be in the basic stance position. We always start the move with the foot that faces our direction. In defense cross stepping should be avoided, as it puts the defender in a disadvantaged position. The hand that faces our direction is held down, while we hold the other one up. Holding down one hand we disturb the dribble, while with the hand we hold up, we try to prevent passing and shooting. Every basketball player should be able to perform a retreat step without a cross step (Pâder, 1968).
3.2. Ball-handling technique

**Holding the ball**

We need to be in basic stance, grab the ball by its side, and keep it in front of the chest, as we were to form a basket. The finger pads touch the ball, the thumbs point towards each other.

**Catching the ball in standing and in moving position**

In basketball it is most common to catch the ball with both hands. Technically it is very similar to passing; but it is performed the other way round. It is easy to perform if the pass arrives at our chest. We can catch the ball while standing while moving or after jumping. While performing, the arms should be in front position and should form a basket so that a ball can fit in it. The thumbs should face each other. Players should turn in the direction of the arriving ball with open fingers. When the ball is caught, we must bend the elbow and let the ball reach our chest. The bending should be somewhat slower than the speed of the arriving ball. We can help blunting the speed of the arriving ball with our upper body or with a retreat step (Kristóf, 1999).

**Pivot**

This technical element is a peculiarity of basketball. It means that we use one leg to pace around the other. It is useful in a situation where the offensive player stops while the defender attacks aggressively. In order to prevent the defence from getting the ball, the offensive player can apply these pacing movements. This is called pivoting. The leg that is responsible for the pacing is called the stepping or pivoting leg. After getting the ball in a standing position the stepping leg is always the one which is put forward, and after we stop, it is always the one that
touches the ground last. If in a standing position the two feet are parallel with each other, either could be the stepping leg. The one that stays in place is called the support leg. We must perform this pacing movement in a way that after each step we have a stable, balanced position. This should be the basic stance. The turn should be on the front part of the supporting foot, it can be a tiny step or a whole circular movement. It can be performed forwards and backwards (Bácsalmási és Bácsalmási, 2005).

![Picture 62: Pivoting](image)

**Ball handling**

It is an inevitable element of basketball, as it is the only way to change our position in the game. This is due to the rules of the game. Acquiring the perfect technique in ball handling is crucial because it is required in game situations such as rhythm and direction changes, stops, passes and shoots. Ball handling simply means bouncing the ball on the floor continuously. In order to perform it properly the arm, the elbow, the wrist, the hand and the fingers must be in harmony and move together. Fingers only touch the ball softly. We can perform ball handling while standing and while moving. Keeping the rhythm is also our option. Concerning the height of the rebound ball, the ball handling can be high or low.
**Low ball dribbling**: the ball only bounces back to the height of our knees and we start hitting it to the ground from here. This requires strong bending of the knee and leaning forward of the upper body. Primarily, we should apply it when trying to break the defence. This type of ball handling is usually without any rhythm.

**High ball dribbling**: the ball bounces up the hip and we hit it back to the ground from here. The knees are somewhat less bent, the torso is straighter. In case of this ball handling we keep the rhythm, which means that in case of a right hand dribble we bounce the ball off our left leg. We should apply it while running fast.

**Short and long starts**

**Start:**
It is one of the most fundamental rules of basketball. While making the first step, we must let the ball bounce off in order to prevent travel, regardless of the position we occupy when catching the ball. There are two types of starts, short and long.

**Long Start**
The opposite arm and leg are involved. In case of a right hand dribble we bounce the ball off our left leg. Our leg and the ball reach the ground at the same time. With our right hand we hit the ball next to our left ankle and continue the ball handling according to what we have learned before.
**Short start**

The same arm and leg are active. In case of a right handed start we bounce the ball off the right outer ankle and continue the ball handling. It is important that ball and leg reach the ground at the same time (Bácsalmási és Bácsalmási, 2005).

**Picture 65.: Long start, short start**

**Stops**

There are two different types of stops in basketball: jump-stop and stride-stop. In case of a jump stop we catch the ball in the air, then the two feet descend back to ground at the same time in line with each other and we occupy the basic stance position. Regarding this type of stopping either leg can be the start or the support leg. A stride stop involves a one-leg jump. In this case after the other leg lands on the ground, we lower the centre of gravity, knees are bent and for the next step we support by turning the foot of our jumping leg inward and we stop. A stride stop is the most common form of stops in basketball, so teaching this type is considered important. It involves three phases. Stopping itself is performed in two rhythms, as this is the maximum allowed for a player with a ball in hand. Out of the three steps one is the start, the other two mean the stopping. This start-stop movement involves a special rhythm, called ‘tá-tí-
Passes

Passes with two hands

Two-handed chest pass

This is the most commonly used pass in basketball. The player needs to hold the ball at chest-level and pass the ball to a teammate by extending both arms. At the end of the pass the palms turn outward, thumbs face the floor. The last fingers to touch the ball are the middle and index fingers.

Passes with one hand

Baseball pass:

It is very similar to the passing technique used in handball. The starting position is a cross straddle, and we put the leg forward which is opposite the hand responsible for passing. We hold the ball with two hands and by swinging it across our chest roll it into the throwing hand. Then we lift it up to the shoulders and swing it to eye level. The fingers of the throwing hand are open and are put behind the ball. With the other hand we put the ball into the throwing hand. The forearm and the upper arm are at right
angles. At the moment of passing the elbow of the throwing hand is extended and with the help of the wrist and with that of a powerful swing, we pass. Turning the hip can also help perform this movement. During passing it can also occur that we take a tiny step with the front leg.

**Baseball pass**

**One-hand pass**

It is very similar to two hand passes. It is commonly used by team players who run towards each other. In other words, it is usually applied during dribbling. When performing it, we take a step with the leg which is opposite the throwing hand, and at the same time we place the ball into the throwing hand with the help of the supporting hand and lower it to hip-height. The throwing hand is slightly bent. The supporting hand breaks off gradually at the moment of passing, while the throwing hand is stretched at the elbow. We pass the ball to a teammate with slightly moving the wrist. It can be performed by taking a step with the leg of the same side as well.

**Hook pass**

It can occur during the game when simpler pass types are more difficult to apply. In such situation could a hook pass be useful. It is not part of the curriculum; however, it is a rather spectacular pass type that players like to apply. It is worth teaching as a leading exercise. When performing, our standing position is at right angles to the passing direction. Our shoulder opposite to the throwing hand faces the passing direction. We hold the ball with two hands in front of our chest.

First we take a step with the leg that is opposite to the throwing hand; at the same time we use our supporting hand to place the ball into the throwing hand. In a side-mid posture with bent elbows we lift the ball along an arch above the head. The supporting hand is also involved in the pass; it follows the pass as far as the shoulders, then it comes off gradually. As the upper hand reaches the ears, we release the ball above the head, with a strong move of the wrist (Kristóf, 1999; Bácsalmási and Bácsalmási, 2005).
4. SHOOTING

Shooting has seen a lot of changes over the years. It has come from two-hand passes to one-hand ones. This is due to the development of tactics and the changes concerning the size of the ball. The mini ball is of the size 5, women’s’ basketball is of size 6 and as for men, they play with a ball sized 7. Shooting with one hand is the most common in all age groups.

**Shooting from standing position**

One-hand passing has become dominant, thus during the course of the training we are also occupied with this form of passing. This is shooting with one hand from standing position. In a cross-straddle position we put the leg in front that is identical to the shooting hand. We hold the ball with two hands at chest level. Then we occupy the shooting position by bending the ankles, the knees and the hip, and at the same time we roll the ball into the shooting hand and swing it as far as the forehead. The ball is in our shooting hand, the other hand only supports from the sides. We aim between the two legs, under the ball. Shooting starts with stretching of the ankles, the knees and the hip. We start the shot in a slanting high-posture. The supporting hand comes off the ball gradually. Shooting ends with a wrist-movement, the fingertips touch the ball last.

**Jump shots**

**Off one foot**

*Lay-up shot*

This is the one type that students need to learn to perform with both hands. When performing it with right hand, we step forward with the left foot and bounce the ball on the floor. We pick up the ball as the right foot hits the ground. This step is a little longer and involves lowering of the centre of gravity. Then we strongly jump in the direction of the basket. This lifting is supported by swinging the right knee upwards and that of the ball into the shooting hand. We always shoot at the highest point of the jump. We land on either the jumping leg or both into a stable balanced position.
**Lay-up after catching the ball**

Performing it is very similar to that of the lay-up shot, the difference is that we shoot without bouncing the ball on the ground after catching it. Students need to acquire it on both sides. Catching the ball always involves the leg of the side from which we shoot. The leg at which the ball arrives at is crucial as we always score with the hand of the same side.

**Lay-up shot with turning**

Performing it is very similar to that of the lay-up; the only difference is in the footwork. During matches it often occurs that the ball arrives at the back or at the side, thus we have to perform from there. We put weight on the leg that is identical to the throwing hand and by turning the other foot in the direction of the ring/hoop take a little step and turn our body towards the ring and jump. This jump is supported by the up and inward moving of the swinging leg. The other stages are the same as that of lay-up shots.

**Hook shot**

Performing it is very similar to that of the hook passing, the only difference is that in this case the player faces the basket. This is a popular type of shooting among midfielders, as it happens far from the defence, in a high arch.

**Shooting from beneath with one-or two hands**

It is a popular type of shooting, even among children. In everyday life it is also known as the”waiter-shot”. It is usually performed under the hands of a defender, after a jump far from the basket.
**Shooting with one hand from beneath**

Performing is very similar to that of lay-ups. After the right foot lands on the ground, we jump off the left foot, then after a strong swing we stretch the right foot forward and at the same time roll the ball into the shooting hand. Then the ball will be beneath. Shooting starts by stretching the arms at the shoulders and elbows upwards, then we perform the shot by spinning the ball forward from the palms. We reach the ground with the swinging leg (Kristóf, 1999).

**Shooting with two hands from beneath**

It is very similar to its one-hand variant; the difference comes after we jump off the left leg. After jumping off, during the so called flying phase we perform a knifing move with both feet. At the same time, we hold the ball with two hands, and by swinging it first down, then upwards, with a strong stretching of the arms and moving of the wrist we swing it back and place the ball in the rink or on the backboard. We reach the ground either with the swinging, or with both feet.

In basketball tactical knowledge is crucially important. During a match applying the proper tactics can be of great significance. This is particularly true of the 21st century basketball, as today modern computer programs are used to analyse the opponents and they are also useful in developing tactics that are thought to be the most appropriate against the opponent team. In other words, tactics is an idea that we apply in order to win. In case of younger age groups we need to remember that tactics is not everything, it is at least as important to focus on the game itself. Knowing and applying the proper pedagogical methods is crucial (Könyves-Müller, 2001).

**Off two feet**

**Jump shot**

It can be performed in standing or in the air after jumping off both feet. This is the most common type among shots. Players use it for middle and far distanced shots. The foot identical to the shooting hand is in the front. When shooting starts, the ankle and the knee are bent. The upper body should slightly lean forward. Then, we straighten the upper body out; at the same time stretch the ankles and the knees, as well as we bring the ball up to eye level into the shooting hand. The supporting hand balance the ball on the side. We always shoot at the highest point of the jump. We swing the arms upwards to a slanting high posture while the supporting hand moves off the ball gradually. Shooting ends with a powerful wrist movement, the fingertips are last to touch the ball. After shooting we land on both feet. (Szabó, 1961; Kristóf, 1999).
5. PERSONAL TACTICS

Tactics are personal decisions where a player not only observes movements of the defence, but keeps in mind the position of his own teammates as well; then, based on this tries to find a solution to a given game situation. Without teaching the proper technique, our game will not be of high standards. When the technical training of students reaches the proper level, it needs to be combined with their tactical training.

![Diagram of personal tactics]

**Figure 11.** Technics of defense

**Division of personal tactics**

*In offense*
- dribbling
- positioning
- getting rebounds

*In defence*
- positioning
- tackling
- seizing the ball
- getting rebounds
Positioning in offense

It means that the offensive player tries to get rid of his defender, tries to find an empty spot and thus create a more ideal position for scoring a basket. It can be practiced through 1 to 1 exercises.

Types of 1 to 1 games

Without the ball
- cuts
- getting rid of the defender

With the ball
- dribble to start, then breaking either with long-or short start.
- dribble to start, then shooting
- dribble to start, then passing
- dribble to pass, then breaking either with long-or short start
- dribble to pass, then shooting
- dribble to score, then breaking either with long or short start
- dribble to score, then passing
Cuts without the ball

When a player uses various body dribbles during cuts, the aim is to obtain a position from where he can perform a successful attack after receiving a pass from a teammate. It is important that the offensive player keeps the centre of gravity low, as he usually starts out by supporting one leg in his direction, then the cut ends with the powerful moving of the other leg. In other words, it is a suddenly performed running movement of the offensive player to get rid of his defender.

Types
- C-cuts
- L-cuts
- V cuts
- Back-cuts

Cuts

It is different from the previously mentioned cuts in that when a player uses various body dribbles during cuts, the aim is not to get a direct score, but to obtain a position where he can catch the ball. Thus, the movement itself is rather opposite as in this case the offensive player moves in the direction of the ring, then takes a sudden step back towards the eight-second line and attempts to get the ball.

The methodological order of a 1 on 1 offense

- dribble
- cuts
- scores
- hand-dribbles
- blocking of the player with the ball
- 1 on 1 offenses from various parts of the court (with passive, half-active, active defence). 1 on 1 game is the most fundamental element of basketball.
Types of 1 on 1 game

- with passive defence
- 1 on 1 game with passive defence but without any restrictions.
- 1 on 1 game with restrictions-for instance: how many bounces are allowed, or from which part of the court should the 1 on 1 happen
- 1 on 1 game competitively-we can count scores between two students, or it is also possible to have a 1 on 1 championship that involves more teams.

Tactics of personal defense

Similarly to offense, defence also consists of elements that require not only good technical performance, but other abilities as well (Kristóf, 1999).

The obvious aim of a defender is to prevent the offensive player from scoring baskets. Within this:
- preventing cuts and breaks
- interfering while the offensive player is catching the ball
- making the ball handler pick up the ball
- forcing the opponent towards the side-line, to a narrower area
- blocking the ball handler or the thrower
- getting rebounds

Compared to handball, basketball requires a much clearer defence. Although “no-contact basketball” is in the past, we can still say that good defence always requires low centre of gravity and fast defensive footwork. While teaching taking time to harmonize the defensive arm and footwork is important, as they are both fundamental requirements in basketball.

Personal defence tactics can be grouped along the following lines
- Basic stance
- Defence movements, positioning
- Block of the ball-handler
- Defensive rebound against a thrower and against a non-thrower

Positioning in defence

It is the most important and most fundamental rule in basketball that a defender player is always on the imaginary line that connects the offensive player with the ring of the offensive end. In other words, the defensive player needs to be between the ring and the offensive player.
Depending on the game situation, a defender needs to keep distance from the offensive player. Two kinds of situations can occur. We can block either an offensive player with ball, or one without a ball.

**Tasks of a defender while blocking an offensive player with ball**
- forcing the offensive player to move to the narrower parts of the court, towards the base and side lines.
- making the ball handler pick up the ball
- get the ball from the offensive player
- block during scoring or passing

**Tasks of a defender while blocking an offensive player without a ball**
- prevent cuts through proper collision
- prevent cuts through good footwork
- prevent screens of the offensive player with a proper collision

**Tackling**
In case of front tackling it is crucial that defenders always try to tackle with the hand that is identical with the dribbling hand of the offensive player. If a defender fails to do that and tries to tackle with the hand across, compared to the hand of the offensive player, he will most likely commit a personal foul. Various physical education games can serve as good methods in teaching children how to block and to practice ball handling.

**Getting rebounds**
Why is it important to get rebounds?
- Getting the defensive rebound reduces the chances of the opponent team, getting the offensive rebound on the other hand makes scoring possible.
- If we catch the defensive rebound and perform a good outlet pass, we can apply fast break against our opponent.
- Getting offensive rebounds can help us fight out personal fouls during offenses.
- Getting a defensive rebound keeps the players positive.
- As getting rebounds can decide the outcome of a match, teachers should emphasize the proper technique and tactics from the beginning.
6. PART-TEAM TACTICS

In order to apply the proper team-part tactical elements, it is inevitable that a player is able to apply personal tactical knowledge on a proper level. In team-part tactics we should not only take our own position into account, but that of our teammates as well. Thus we should intentionally try to put our teammates in position, or if the situation demands, help them in the defence work. Team part tactics should be taught from the beginning of junior high school. We should always bear in mind though, that it is better to start from simple situations and then proceed to the more complex ones, which involve multiple relationships. The smallest unit of the part-team tactics is the 2 to 2 game, although we must not forget about 2 to 1 game that is superior in number and 1 to 2 game which is disadvantaged in number. The most commonly used part-team tactics is the 3 to 3 game, as in this game students can practice in all the positions used in basketball.

In the offensive part-team tactics it is important to call attention to the advantages of finishing a fast break and to the efficiency of offenses against a disordered defence. In order to perform a proper finish of these fast breaks, players need to possess a technical grounding of a certain level. School teaching should focus on finishes against 2 to 1 and 3 to 2 offenses. By the end of their primary education students should be able to solve situations where they are superior in number and should be able to apply fast break offenses.

2 on 1 game

In this situation two offensive players attempt to perform a successful offense finish against a defensive player. We can start teaching students how to solve 2 to 1 game situations from 5th grade, although if our team has good technical skills, we can also teach them at an earlier age. The best way to practice it is through double running games with one defender.

3 on 2 game

This type of game is already a higher level of basketball. Training can be most successful amongst 12-14 year olds. Naturally, the abilities of the students can be of great influence. Offensive players have a harder job in making the right decision, as with proper communication the two defensive players create a well-organized defence. In order to take advantage of a lay-up situation, a player needs to be familiar with the technique of the overhand lay-up.

**In a 3 on 2 game, the following fundamental principles apply:**

- Offensive players should get familiar with all the offensive lanes of the court as they are necessary to perform a successful offense.
During a 3 on 2 game it is important that the player with the ball commands the offense in the middle lane of the court.

-Depending on the position of the defenders, it is easiest to pass from an offense controlled in the middle, which puts one of the students in a lay-up.

- The easiest form of training is a full-court press of three offensive players with a ball against two defenders.

2 on 2 game

In team part tactics a 2 to 2 game is the smallest unit. In school training however, it is the most important, as concerning tactics it is a level that we must reach even with a group of weaker preparedness. In a 2 on 2 game we find all the tactical and technical knowledge that we have taught our students.

Adequate knowledge of the following technical elements are needed in a 2 on 2 game

**In case of players with the ball**

- knowledge of handover lay up (with an advanced group from fifth grade, we can try teaching jump shots as well)
- proper dribbling technique
- adequate technical knowledge of various passes

**In case of players without the ball**

- familiar with types of breaks
- appropriate performance of cuts
- the most important screen types, as a new element of teaching

**Types of screens**

Screens come in two types: one involves the ball, that is, a defender gets screened by one of the teammates of his offensive player. The other is the off-ball screen, where two offensive players apply one of the screen techniques without the ball. The screen depends on the position of the screener, compared to that of the defender. Thus we have front, back and cross (lateral) screens.

It is important to teach children how to perform screens properly; we can only have a legal screen if the screener is not moving, but stands still with both feet on the ground.

We should not only emphasize movements of the offensive baller, but students also need to learn that of the person who sets the screen. When an offensive player moves away from his
defender after setting a screen, that is called cutting off screen. This cutting can happen in the direction of the ring with the purpose of catching the ball somewhere near the ring, or it can be in the opposite direction.

![Images of players playing basketball](image1.png)

**Picture 71.: Type of screens**

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**3 on 3 game**

As already mentioned, a 3 to 3 game is a higher level of team part tactics, where all live game situations can be practiced. Opportunities can evolve through cuts, penetration with ball, and through increased number of on-and off ball screens. The importance of this form of tactics is clearly shown by the fact, that separate 3 to 3 game world championships are held, according to specifically created rules. In a 3 to 3 game students are forced to collaborate even more than in previously learned tactics, thus the methodological phases of teaching it are the following:

- game with 3 players against a lined up defence
- 3 on 3 half court
- 3 on 3 full court

Students, of course need to be able to apply the previously learned fundamental elements from the 1 on 1 and 2 on 2 games. Another important guideline by teaching 3 on 3 games is that we gradually increase the activeness of defensive movements. It is best to start the training with the passive defender, then move on to half-active defence, and finally teach the fully-active defence activity.

**What advantages does teaching 3 on 3 games have?**

- It is enough to have half of the gym, thus it is possible to teach a 3 on 3 game even if more than one class is in the gym
- During this type of game even students who are less talented have the opportunity to practice all the situations occurring in basketball, as compared with a 5 on 5 game, here no players can be left out of the game.
- Compared with the 5 on 5 game students have a much bigger room to apply all the learned tactics

- Not only students with poorer technique have a better chance to be part of the game, but in a 3 on 3 game students in general touch the ball more than they do in 5 on 5 games.

7. TEAM PART DEFENCE TACTICS

On the basketball court, the collaboration of the offensive players, their systematic attacks can only be prevented by a cooperative and organized defence activity.

The following situations should be practiced:
- defence in outnumbered situations
- defence with equal numbers

Methodological recommendations should be taken into account
- Teaching the proper defensive base position.
- Teaching the proper defensive footwork and the necessary physical footwork.
- First the basic principles of the 1 on 1 game should be taught, only after can students get more familiar with team defense.
- P.E teachers should emphasize the teaching of basic skills. Tactics should only be taught on a basic level. Students can learn this in a greater detail in workshops.
- Within the framework of various games we can teach our students the foundations of a good defensive move in a playful way.
- While teaching man-to man defence, the emphasis should be put on the competitive performance of various tasks, but only if our students already possess the proper techniques.

8. GAME SYSTEMS THAT CAN BE APPLIED IN TEAM TACTICS

It is important to note that in primary education teaching is focused on man-to man defence. Zone defence should only be taught in the framework of clubs.

It is clear that teaching offense systems will be relatively easy, as all students would like to score baskets (Ránky, 1999).

As already mentioned, offenses can be against well-or less organized defences. A defence will be less organized if not all the defender players arrive back under their own backboard.
In primary education we should give students as much freedom as possible in press offenses. Make students familiar with the most fundamental principles. Press offenses can be easily established through 2-3 zone attacks.

If there is a chance, we should make students practice these tasks on a full court. The last phase is when press starts are practiced during the game.

9. DEFENCE SYSTEMS IN TEAM TACTICS

It has already been mentioned that in primary school man-to man defence should be introduced first. Thus, this is form is discussed here in details.

Man-to man defence

After our students have acquired the proper basics, we can start teaching man-to man defence on the team level. It is important to introduce them to all the posts that occur in basketball (point guard, forward, centre). For these positions special training is required, which is the task of clubs. We should also make sure that we do not pair up students with different levels of skills while practicing defensive tasks during a 5 to 5 game. Instead try to pair up students of the same level. If a student of great offensive talent faces one who is less talented, the motivation of the latter to be active during the training will be broken down.

We can prepare man-to man defence with the following games:
- Various tag games without a ball
- Tag games involving dribbling
- Scoring games

It might be useful both in 3 on 3 and in 5 on 5 games if students play either on half-or on full court without bouncing because while attacking they can practice cuts. In defense, they can apply and practice different forms of defensive techniques against cuts.

10. STREETBALL, 3X3 BASKETBALL

Streetball

Streetball is passion. Though it is not always beautiful, one could easily call it streetart. It is a rough sport for tough men which does not allow much of weakness. Streetball means competition including embarassement and sometimes even humiliation of opponents. However,
it is a basis for friendships because there is one basic ingredient that connects all players: the love for the game.

Without any referee the flow of the game completely relies on the respect and the communication between the players. As a matter of fact this established different rules on every court where spectacular tricks count more than accurately obeying the rules of basketball. Traveling is accepted if an opponent-embarassing move is the result. Streetball is a sport that involves every part of your body, even the mouth: If you master trashtalk you master the court. Distracting the counterpart and entertaining the crowd is as much important as the actual game. These various aspects made streetball such an attractive show as it is today.

From its beginnings in the 70’s in the big cities of the US until today the rules haven’t changed much but it’s got more and more influence within the street cultures around the world. Having its roots in the famous Rucker Park in New York City, streetball stepped up to other courts and cities where it was not enough for the boys to play on the team in their highschool.

Having not many opportunities for spending their free time streetball was the only chance to emulate their big idols from the ABA and later the NBA. Rapidly the games attracted a steady audience celebrating the vicious tricks and ankle-breakers of their “court-stars”.

These players became local legends and got nicknames within the community like “the Destroyer”, “Helicopter” Erving showed his talents at the Rucker Park tournament in 1971. Butch Purcell, who kept track of the stats at Rucker Park, said about him: “Man oh man! He was dunking on people like crazy. Back then the games were only held on the weekends, so that next week, the word was spreading like wildfire over the city. When we showed up that next week to play our game, the park was
so packed that people couldn’t get in.” After having played for three years in the team of the University of Massachusetts and pulling off tremendous stats there, he was not quite known within the audience at Rucker Park.

**Streetball**

Nevertheless, Ernie Morris, a witness of the legendary encounter between Julius Erving and Joe Hammond claimed avidly: “I’ve seen so much great basketball in that park, but I’ve never seen anything like it since.” Thus, the legends around “Doc” laid the grounds for the incomparable success of streetball.

In the following decades it also got recognized by the dominating basketball brands like Nike and even induced brands like Kickz and AND1 to build their corporate identity on that specific form of basketball. This increasing interest by the economy was further promoted when Allen Iverson made it possible for a sheer streetballer from Philly to succeed in the NBA. He was beloved by the whole generation of young streetballers and established the streetstyle within the NBA.

Iverson’s popularity made it possible for Reebok who signed him to advertise the streetball culture and gain profit from it. Even today in the commercialized and digitalized environment of the NBA the biggest stars such as Kevin Durant or Kyrie Irving don’t hesitate to come out and demonstrate their skills on the court. One could argue that the pure streetball does not deserve this development because it lacks tradition and identity.

However, streetball is still played in its traditional form around the world and the main components sustained: When you dare to play streetball it strengthens your credibility… even if you lose, you win the respect of everybody on the court.¹

¹ [http://www.kickz.com/blog/2015/05/29/the-history-of-streetball/](http://www.kickz.com/blog/2015/05/29/the-history-of-streetball/)
History: the birth of 3x3 basketball

The beginning of FIBA's intensified focus on 3x3 basketball came in 2007, when FIBA decided it would experiment with an alternative form of the sport at the 2010 Youth Olympic Games (YOG) in Singapore.

Examined in February 2007 by FIBA's Youth Basketball Commission and International Competitions Commission, 3x3 basketball was recommended to the FIBA Central Board as the format of play for the 2010 YOG, and approved in December 2007.

It was chosen because it is a sport with a young, urban and positive image, as well as for its universality and for the limited infrastructure and equipment required to play. Accordingly, 3x3 basketball was identified as a potential catalyst for the development of the sport of basketball worldwide.

In the lead up to Singapore, FIBA worked intensively on putting in place a unified and adapted set of rules for 3x3 basketball, while also examining the possibility of further international 3x3 tournaments as well as a 3x3 calendar.

3x3 made its first appearance on the international stage at the 2010 YOG and was labelled as "the hottest ticket in town".

In September 2010, the FIBA World Congress in Istanbul was provided with an in-depth presentation of the discipline and FIBA's ambitions for the further development of 3x3 basketball, which included it becoming an Olympic discipline.

A set of objectives and recommendations from a specially set-up 3x3 working group were combined to form a roadmap for the further development of 3x3 basketball. This included an improved set of rules as well as a technology driven strategy centring on a worldwide network of competitions and an online community of players. Participation and performances would result in an individual ranking, with players able to switch freely between teams from one tournament to another.

The roadmap was approved by FIBA's Central Board during their meeting in Lyon on 13 March 2011, and the go ahead also resulted in a test phase held over the summer of 2011, during which FIBA collaborated on large number of 3x3 tournaments, gathering data and feedback.

Another important milestone was reached in September 2011, with the first ever FIBA 3x3 U18 World Championship for boys and girls being held in the Italian seaside resort of Rimini.

The final pieces were put in place in December 2011, with FIBA's Central Board giving a further green light to an international calendar of competitions, beginning in 2012 and including
the FIBA 3x3 World Championships and the FIBA 3x3 World Tour, the flagship events of a worldwide integrated Competition Network.

The launch of the player community and tournament network platform 3x3Planet in June 2012, completed the first chapter of the story of 3x3 basketball.²

11. SELF-CHECK QUESTIONS

1. When and where did basketball develop?
2. Who was the founder of basketball?
3. Which are the off-ball technical elements?
4. List all the technical elements involving the ball.
5. What is a pivot?
6. How many ways do you know to start?
7. What is an overhand lay up?
8. How is a jump shot different from an overhand lay-up?
9. What is meant by tactics in basketball?
10. List the most important tactical elements in the primary age group.
11. List the most important types of cuts and screens.
12. Describe the division of personal tactics both in offense and in defence.
13. What are the most important features of the tactics of an advantageous offense?
14. What are the most important characteristics of the 1 to 1, 2 to 2, and 3 to 3 offenses?

12. READING


² http://www.fiba.com/3x3/history

http://kosarsport.hu/mkosz/?kosarlabda-tortenete
http://kosaredzo.hu/tamado_alapallas/
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