

The future of handball

To be involved in sports means to improve and enhance yourself, but to do it in synergy with others, which is the ultimate goal of handball as a collective game.

I see sport, including the game of handball, as a challenge with which my opponent drives me to excellence, diversity creativity and innovation.

Creativity stands for the identification of problems in the game and their unique solution. Only what is new is creative. It is this path of thinking that must be taken when contemplating the future development of handball.

There is no creativity without knowledge that begins with curiosity.

Curiosity is the coach's life driving force. One should always seek for a hill from which the sight is clearer. Curiosity is the desire to learn and to know.

In order to make progress and to have future excellent and creative handball players, we must change the technology, i.e. the methodical-didactic approach in our daily trainings. Those are the changes.

Unfortunately, it is always the most difficult to enact changes in work, due to a large amount of resistance, not only in creating the handball model of the future, but also in everything associated with the development of the game of handball, such as changing the current handball rules which favour the judges' subjective assessments allowing for a large potential of injustice and manipulation. The sport ethics tells us that the better should win, not the richer, the more privileged or the one with a large "backing".

It is of utmost importance to change the training technologies, because the in-game diagnostics must be in balance with what we do during the training.

I recall the quote from the famous scientist Albert Einstein who claimed that it would be a madness to expect a better result by always doing things in the same way.

It is only through change that we can make progress, as the habit is the enemy of learning. Sport is an area of life with measurable truths and facts, those being the results.

Handball is a game involving a larger number of players, who are in constant motion and conflict on the individual, group and collective level, which is not easy to analyse.

Unfortunately, nowadays, handball is the sport with the least number of scientific studies and evidence on the effectiveness of various training and coaching methods. In order to advance the physical, as well as the TE - TA conditioning methodology, much greater attention needs to be placed on these areas of research.

The development of players entails the wholesome improvement of a person, i.e. the changing of functional-motoric skills, cognitive, conative, as well as morphological characteristics (body constitution, i.e. the entire potential).

In order to create or model an attractive, future game of handball, we would primarily need to have a strong professional basis; from teachers and coaches to experts of all profiles who are used in the game of handball.

These people are experts in various fields of science. In doing so, we should not forget that handball is not science, but science may still be helpful to handball.

It is hard to imagine a handball of the future without the coach-player and the coach-teacher to tutor the children from their ages of five or six up until puberty. These two coach categories should be well distinguished.

I place special emphasis on the importance of the coach-teacher who tutors the children in handball skills, as well as in the understanding of the game, but who also cares for their proper upbringing. This motoric knowledge and skill transfer process through methodically-didactic operations which aim to answer the questions *how?*, *what?* and *why?* presents itself as a rather complex information and communication problem.

Naturally, the handball of the future will rightly reaffirm the institution of the coach, as well as his authority.

The future of handball requires the player to think, train and play intensively, to be creative, as well as innovative as a coach. Innovation itself starts from pioneering ideas.

From the standpoints of movement structure (technique – *how?*) and situational in-game structure (tactics – *why?*) handball is one of the most complex collective games, dominated by rapid transformations from one action to another.

In order to model the development of the handball future, it is imperative to determine the parameters of the situational efficiency of every player in competitive conditions of the sport

competition itself, but also in synergy with other players in the team. Statistical data from major events do not speak in favour of this.

Handball entails two basic conditions: Position and transition. When discussing position, we refer to the positional play in offense and defence (6:6), while transition means the quick centre, counteroffensive, semi-offensive, extended offensive and the returning back to defence positions.

These days, we can speak of two handball game systems, i.e. of two different approaches to game strategy, which, of course, correspond to the structure of the team, the technical-and-tactical readiness and the sheer potential of the players. A good system is in fact the continuous manifestation of game organization as an indicator of sport preparedness.

Of course, the game system has its own concept and style – its strategy and tactic. The game system determines the basic player activity in defence, offense and transition.

One of the systems has its foothold in a controlled game with the maximum tactical discipline, with less tempo and risk involved.

Another system is characterized by the domination of the continuous game, or a non-stop game with a tendency for constant play acceleration and preservation of high game tempo with fast switching from defence to offense, quick transition and vice-versa.

Whatever the case may be, it is imperative to generate and create players of a quick mind that thinks and reasons fast.

Fast detection and resolution of game problems. Each system provides enough freedom for the player to express his creativity and originality.

The formula of success in the handball future is as follows:

Technique + intensity = success

Technique and tactics should be trained simultaneously. Only when the player masters the tactics does he become a real player. However, one should know that without a good technique, no tactical idea can be put into practice.

Still, let us not forget that tactics last for a day, while technique for a lifetime.

Tactics is learned when the player is constantly asking himself: *What will my opponent do next?* Next – *How should I be answer with something he does not expect?* The handball player

of the future is farsighted. He knows how to read his opponent, so he consequently hinders, delays or prevents his decision.

In the future, the model of a top-class player will have increasingly less tolerance for tactical mistakes in the game which are the result of memory first and foremost, because the player failed to recognize the in-game situation. This is a skill developed with the situational method of learning.

Further error analysis branches out in two directions:

1. The player does not realistically and objectively perceive the in-game situation, it means either prematurely or erroneously.
2. The player stands by his first decision and resolution even though the in-game action took another turn of events.

The future will be dominated by a dynamic game, the speed of player movement, and complex change in player positions. We will no longer have offense or defence specialists, but wholesome universal players.

Naturally, this will require the speed of the tactical response which represents the greatest and the most difficult challenge, as well as the ultimate goal of every top coach, both in defence and offense. In order to achieve this, many details need to be perfected, especially in the field of cognitive abilities such as:

→ anticipation

→ perception

→ elaboration

→ decision making

Therefore, the speed of the tactical response depends in 70% on the cognitive and mental abilities, and in 30% on motoric skills.

In the future, our player will need to be proactive, meaning that he takes the initiative and the responsibility to set up events, and not to be ruled by the behaviour of others, meaning to be reactive and granting opponent players power over himself.

This is the model of the handball player of the future. Particular attention should be placed on four aspects in the game, being as follows:

1. The essence of tactics is the movement without the ball, momentum, receiving of the ball, and the movement with and away from the ball.
2. The tactical option is the ability to use space in the horizontal, vertical and semi-circular way.
3. Teaching players to attack empty spaces.
4. Timing as the timely resolution of in-game situations (situational agility).

It is important to know that many players stopped advancing, because at some point they chose to focus too much on improvisation and ceased the development of their TE–TA elements.

It is important to note that in the future, many new methods for the development of TE–TA proficiency and player skill will have to be applied with the aim to:

- Have the TE–TA in-game knowledge, skills and habits acquisition performance and speed be conditioned by the level of coordination development and the number, as well as the quality of the in-game task repetitions. In addition, the player's alertness and focus, as well as the scope and the attention and concentration retention should all be developed on a continuous basis.

- Have the player motivation be directed to conscious learning (learning with understanding), not to rote learning. When, why, where and how to apply TE–TA knowledge should be a daily habit.

- Train the in-game reaction speed, because this speeds up the individual and the team game. Likewise, the situation training should instruct the players on how to read the game.

- Automate TE–TA skills, because highly developed motoric programs release cognitive abilities.

- Place more focus on younger players in senior teams as they may be the carriers of innovation within the game. Köln 2015 – Final Four: 60% of players were from the ages 30 to 35, 20% from ages 35 to 40, and 20% of players up to the age of 30. This proves how coaches lost the courage and became hostages of older players.

- Reduce the overemphasized work on the body (physical) preparation at the expense of the TE–TA player literacy which results in players who, in terms of in-game knowledge and abilities, lack education and training. For example, the run fast, but their handball game stutters. The in-game effect cannot be measured with a stopwatch or by meters or kilograms alone, it depends primarily on the TE–TA abilities of players.

In the future, the selection of players, which will be ruthless, will have an extraordinary importance. The selection is a creative task for a coach and demands his professional knowledge and experience. Such a selection inevitably includes the elimination of many talented handball-oriented players, who have no qualities needed for teamwork. Team learning will be vital in the future, too, because teams and not individuals are the fundamental learning units in a modern organization.

In any case, the 21st century will be marked in whole by the competition in knowledge, creativity, innovation and in the ability to reason. Only the application of new creative methods and thinking contributes to progress and results. As an example, the process of training children under the age of ten uses teaching methods like playground and workshop *in which you play in order to learn*. With less than 20 hours a week over a period of 10 years, a player cannot become world class. Without additional trainings one cannot accumulate 20 hours of training in a week.

Talented leaders-coaches are always searching for good people. Many coaches did not have as much success in their coaching careers as they deserved with their work and knowledge because they had not made a good selection.

Among 10 talented players, it is necessary to recognize one super talent and invest in him, which is really a quality selection; still, many people can recognize mostly those who do not have a shiny and bright future. This makes a significant difference. After all, no methodical and didactical system of training process, not even the best one, is effective, if applied to a poorly selected handball player.

The technique is extremely important for the development of handball play. The problem with technique, however, is how to perform the structures of movement in a biomechanically correct way, which enables the full expression of functional and motoric potential. The technique should be practiced until perfect, for example: To determine the proportion of force and speed which you apply to throw. Coordination, the speed of reaction, the ability to quickly change the direction of movement and keep the body in a perfect dynamic balance are the basic elements of an effective technique. This biomechanics of movement, actually the movements of the whole body or some of its parts, should be continuously repeated, improved and perfected with the aim of reaching a more effective movement in space or handling the ball.

Faster, stronger, further, with more technique, this is the future motto of handball game. The

level of skill is actually the level of technique quality, how to make a movement in the best possible way; rationally, harmoniously and balanced.

The level of knowledge is measured by the quality of tactical behaviour when the player recognizes the problem and knows what he is supposed to do. The tactics is a fight for advantage. Therefore, handball is primarily a mental game.

In defence, there will be no roughness in the future. In addition to lateral speed, the players will particularly be asked to limit the rival's space and time both by the width and depth. This will, of course, be possible with the anticipation and through the reading of intentions of rival players, as well as of their individual and collective actions. The defence will increasingly be played according to the slogan "*plenty of dogs (players) and a dead rabbit (ball)*".

Therefore, the dominant understanding of defence will still be that the attention is focused on the ball and that there, where the ball is, there is also a surplus of defence players. The basic principle of the game is "*the game against the ball, the attack on the ball*". Further on, the number of exclusions will be reduced and the blocking zone will be increasingly applied, primarily by getting the player to shoot and provoking errors of attackers by tactical forcing.

A special common characteristic of the defence will be the shifting of the shallow defence in depth to the front in order to avoid the separation of two defence players, which is what outside players in cooperation with the pivot took perfectly advantage of so far. The interior defence, as well as the thick and deep four defence players, shall still be the impenetrable stronghold in all defence systems, but the play of the back defence players (1 plus 6) will also be significantly improved, especially to support the defence players. The defence, as we know, begins with our throw or with a lost ball. The first task of the attack shall be not to get such an easy goal by any means after the throw. When we are talking about the defence, in the process of training we should simulate a situation, reaction and attention, the attackers' ability to take over and assistance, so that we actually always have the ration of 2:1 in favour of the defence. There are always two defence players against one attacker. It should not be forgotten, that the defence is the trademark of every winning team with a character. The defence is an illustration of togetherness, team work and relationships within a team.

Through his play in the defence, the player presents his personality in the best way. If there were no defence, how would we find out: *Who are you?* Consequently, it is impossible to talk about a good team and a good match without good defence.

The mental training, the training of player's mind shall also gain significance and a new

methodical approach in the future. The operational part of the brain, the one that puts muscles into function, shall be given much less attention than the perceptive part of the brain which reads the environment in which cognitive abilities have the most important role.

Each successful concentration training takes us closer to the victory and this makes for a tangible difference between the winner and the loser. This ability to wilfully focus your attention and thoughts in a desired direction is particularly important when playing under stress and pressure.

Tactics and psychology are the most important things for a good trainer. As far as the players' intelligence (playing abilities) is concerned, it can be recognised by:

1. the ability to recognise in-game situations (reading and understanding the game)
2. the appropriate reactions to the recognised situation (tactic response).

With mental, cognitive training, we improve the ability of thinking and reasoning. The concentration of players on the centre of action will for sure be trained, because in that case the perception of details will be better. Attempts will be made to control the player's mind, which first of all means the reason and memory, the so called rational state.

The mind and the subjective state must always be in balance. Emotions must by no means take dominance, because they weaken the cognitive and intellectual abilities: Attention, concentration and memory.

Therefore, the cognitive abilities like the speed of perception, verbal understanding, logical reasoning, memory - should all be developed. The encouraging of positive emotions and bright mood promotes self-control, openness and controlled aggressiveness, while reducing anxiety. Motivation, self-control and tolerance are also encouraged.

The factors of success which should be worked on as part of everyday mental training are:

1. Exercises in ignoring distractions
2. Exercises for concentrating on what you have to do and how to achieve it
3. Exercises to stay calm and concentrated under pressure.

The brain is like a muscle, therefore exercise it - say the neurologists. The clarity is the most important method of learning, therefore, in the methodology it is the most important to have:

1. few ideas
2. clear ideas
3. good realisation of these ideas.

The handball slogan of the future which we want to promote is: The power of mind and skill against muscles in the game. The future will promote new standards in handball, that is a new creative and innovative model of a handball player who, with his skills, know-how and speed of tactical response, will give a new dimension to the game.

In the future, we want to see a creative handball player and not an athlete, long-distance runner or a body builder. To outsmart your competitor is the purpose of every competitive game.

In the future, we want to see a handball player model whose feet are as fast as his thoughts. A player who processes visual and spatial information at breakneck speeds.

I am confident that there is a bright handball future ahead of us. As a coach who dedicated forty years of life to other people's children in four different countries, I have convinced myself that handball is the greatest and the most attractive European global indoor team game with an incredible number of possibilities for improvement.