

CIRCLE OF A HANDBALL LIFE



IMPRINT

Neuroscience in education and sport: Dr. Ranko Rajovic / SRB

Physical aspects:

Mental / social aspects:

Handball skills and competition form:

Andreas Vock / AUT, EHF Expert

Bojana Jelicic / CRO, EHF Expert

Zoltan Marczinka / HUN, EHF Expert

Beach Handball skills and competition: Dr. Frowin Fasold / Alex Gehrer / GER, EHF Expert

Small games / playing form + competition form: Luisa Estriga / POR, EHF Expert Educational knowledge: Kaj Kekki / FIN, EHF Expert

Administration and layout: EHF Office

Under the guidance of the EHF Methods Commission.

Publication: September 2022

© 2022 EUROPEAN HANDBALL FEDERATION. All rights reserved.



CONTENTS

1.	Overv	riew	5
2.	Neuro	oscience in education and sport	13
3.	Intro	duction to modified game forms in handball initiative / practice	15
4.	Kinde	rgarten Handball (age 3 – 5 years)	18
	4.1.	Physical aspects	18
	4.2.	Mental / social aspects	18
	4.3.	Handball skills (technique / tactic)	19
	4.4.	Beach handball skills (technique/tactic) and beach handball training at	
		kindergarten handball	
	4.5.	Small games / playing form	
	4.6.	Workshop leader / coaches' profile	
5.		Handball (age 6 – 9 years)	
	5.1.	Physical aspects	
	5.2.	Mental / social aspects	
	5.3.	Handball skills (technique / tactics)	23
	5.4.	Beach handball skills (technique/tactics) and beach handball training in mini handball	24
	5.5.	Small games / playing form	
	5.6.	Competition format	
	5.7.	Workshop leader / coaches' profile	
6.	Basic	Handball (age 10 – 13 years)	
	6.1.	Physical aspects	
	6.2.	Mental / social aspects	
	6.3.	Handball skills (technique / tactics)	34
	6.4.	Beach handball skills (technique/tactics) and beach handball training in basic	
		handball	
	6.5.	Small games / playing form	
	6.6.	Competition forms	
	6.7.	Workshop leader / coaches' profile	
7.		Handball (age 14 – 16 years)	
	7.1.	Physical aspects	
	7.2.	Mental / social aspects	
	7.3.	Handball skills (technique / tactics)	41
	7.4.	Beach handball skills (technique/tactics) and beach handball training in youth handball	/10
		Hariubali	43

	7.5.	Small games / playing forms	44
	7.6.	Competition form	
	7.7.	Workshop leader / coaches' profile	50
8.	Junio	r Handball (age 17 – 21 years)	5
	8.1.	Physical aspects	
	8.2.	Mental / social aspects	
	8.3.	Handball skills (technique / tactics)	
	8.4.	Beach handball skills (technique/tactic) and beach handball training in junior handball	5.
	8.5.	Small games / playing form	
	8.6.	Competition forms	
	8.7.	Workshop leader / coaches' profile	
a		r Handball (age 22 – 44 years)	
٠.	9.1.	Physical aspects	
	9.2.	Mental / social aspects	
	9.3.	Handball skills (technique / tactics)	
	9.4.	Beach handball skills (technique/tactics) and beach handball training in senior	
		handball	62
	9.5.	Workshop leader / coaches' profile	62
10.	Maste	er Handball (age 45 – 64 years)	62
		Physical aspects	
	10.2.	Mental / social aspects	62
	10.3.	Beach handball skills (technique/tactics) and beach handball training in master	
		handball	63
		Small games / playing form	
	10.5.	Workshop leader / coaches' profile	63
11.	Recre	eational / Walking Handball (+/- 65 years)	64
	11.1.	Physical aspects	64
		Mental / social aspects	
		Handball skills (technique / tactics)	64
	11.4.	Beach handball skills (technique/tactics) and beach handball training in	
		recreational handball	
	11 5	Small damas / playing form	61



INTRODUCTION

In order to nurture young players effectively, it is necessary to investigate the developmental characteristics as well as the physical, mental and psychological capabilities of each age group.

Armed with this knowledge, the technical and tactical repertoire of handball can be divided so that - starting with the fundamental skills of handball from age 3-4 - a player can acquire the whole movement repertoire of handball before entering senior handball at the age 21-22.

Taking into consideration that nearly 20 years is a significant length of time in relation to the fast development rate of a young child, it is better for clarification purposes to divide this long-term period into shorter, 3-4-year periods.

At this point it is possible to better highlight the training tasks that are most suitable for the development of certain areas in the given time period. However, this sub-division should not be rigid and there are no strict age limits as each individual develops differently even within the same age group.

Instead it is merely a starting point for planning practices and, by highlighting the technical and tactical elements which should be acquired as well as the sporting abilities which need to be developed, the requirements for each age group can be seen at a glance.

This document will give you a basic overview on the various stages in a handball life. The age-groups can differ (depending on gender, competence, physical development) and should be adapted to your national education system. The age groups named here are only a guide and focus on the chronological age.

We are also very well aware that there will be people (especially children in their mental and physical development phases) that will not fit to the group pre-defined here. It is the coaches' tasks to adapt to these individual needs.

Please note that this document is a "living document" and will be updated and enlarged regularly.



1. OVERVIEW

СН	IRONOLOGICAL AGE*			
RECREATIONAL HANDBALL Be active for life	+/- 65 y	PARTICIPATION	STAGE 7 HEALTH & LIFESTYLE	
MASTER HANDBALL Be relentless	45–65 y		STAGE 6 CHALLENGE & PHYSICAL ACTIVITY	
SENIOR HANDBALL Be exceptional	22-44 y	HIGH PERFORMANCE	STAGE 5 OPTIMISATION & PERFORMANCE	
JUNIOR HANDBALL Be determined	17–21 y	PERFORMANCE	STAGE 4 SPECIALISATION & GAME EMPOWERMENT	
YOUTH HANDBALL Be skillful	14–16 y	PERFOR	STAGE 3 CONSOLIDATION & GAME MASTERY	
BASIC HANDBALL Be smart	10-13 y	TNE	STAGE 2 ACQUISITION & GAME LEARNING	Skills focused
MINI HANDBALL Be active	6-9 y	FIRST ENROLMENT	STAGE 1 FOUNDATION & GAME ENGAGEMENT	Fun-focused games
KINDERGARTEN HANDBALL Be curious	3–5 y	FIR	STAGE 0 ACTIVATION & ACTIVE EXPLORATION	Fun / skills challenge games

^{*} the age categories given are only a guide and depend on various factors such as gender, competence and physical development.



Basic overview

Group	Kindergarten Handball	Mini Handball	Basic Handball	Youth Handball	Junior Handball	Senior Handball	Master Handball	Recreational Handball
Stage	Activation & Active exploration	Foundation & Game Engagement	Acquisition & Game Learning	Consolidation & Game Mastery	Specialisation & Game Empowerment	Optimisation & Performance	Challenge & Physical Activity	Health & Lifestyle
			Sport specific performance development vs. participation centred	Performance centred vs. participation centred	Performance centred vs. participation centred	Performance centred vs. participation centred		
Slogan	"Be curious!"	"Be active!"	"Be smart!"	"Be skilful!"	"Be determined!"	"Be exceptional!"	"Be relentless!"	"Be active for life!"
Chronological age*	3 – 5 y	6 - 9 y	10 – 13 y	14 – 17 y	18 – 21 y	22 – 44 y	45 – 65 y	+/-65y



Overview "physical aspects"

Kindergarten Handball	Mini Handball	Basic Handball	Youth Handball	Junior Handball	Senior Handball	Master Handball	Recreational Handball
Status: children are open-minded for new experiences - physical activity should be fun and a part of the child's daily life.	Status: first Golden Age of learning and ready to learn the basics (and also the general rules!)	Status: major skill learning stage: all basic sport skills should be learned before entering puberty / entering stage of development.	Status: major fitness development stage: strength, speed and endurance.	Status: second Golden Age of learning / young, wild and durable – advancement (optimise) of performance.	Status: players are on the top technical and physical level – must be well prepared for games / winning when it counts – performance on demand.	Status: move from highly competitive sport to lifelong competitive sport including master competition / maintaining the joy and fun of movement and playing handball.	Status: holding the active lifestyle without injuries (or minimise the problems) / maintaining the joy and fun of movement and playing handball.
Focus on: development of different general movement skills / active movement environment / general coordination (balance!).	Focus on: Strength: game and fun focused training. Endurance: parallel and unnoticed with other conditional skills. Speed: experience and game focused. Coordination: fun and game oriented!	Focus on: Strength: focus on learning. Endurance: aerobic and anaerobic. Speed: various forms of play in connection with all coordinative abilities. Coordination: various forms of play, skill competitions. Mobility: start with basic mobility work and injury prevention.	Focus on: Strength: basic body strength exercises. Endurance: special playful endurance training Speed: special speed game forms corresponding to structural characteristic of handball. Coordination: special general coordination training. Mobility: all forms of mobility training.	Focus on: Strength: special core strength, max training with additional weight. Endurance: special endurance training using wide variety of training methods in different endurance areas. Speed: special sport-specific speed training and submax; jumping power training. Coordination: special sport-specific coordinative training. Mobility: all forms of mobility training. Injury prevention.	Focus on: Strength: individually adapted and well-timed strength training. Endurance: individual adapted and well-timed with technical and tactical training. Speed: involvement of speed training in technique and tactics training. Coordination: no general versatile coordination training necessary. Mobility: individually adapted and well-timed, all forms required. Isolated mobility training or included in warm-ups and cool downs.	Focus on: Strength: training of muscular hypertrophy and plyometrics. Endurance: maintain performance of cardiovascular system. Mobility: counteracting age- related limitations.	Focus on: coordination (with or without a ball) / balance / mobility / fall prevention / strength training / aerobic endurance.



Overview "mental / social aspects" $\,$

Kindergarten Handball	Mini Handball	Basic Handball	Youth Handball	Junior Handball	Senior Handball	Master Handball	Recreational Handball
Status: discover the world, playing, growing sense of independence, interacting with other children.	Status: having fun, simple rules, fair play and respect, learn by doing.	Status: skill acquisition, learn more about technical and tactical skills, fun and friendship.	Status: cultivate life skills, fun and friendship, definition of personality.	Status: seeking out any resources to improve performance, need to learn time management.	Status: pursuit of excellence, trusted support network important.	Status: having mentors or creating benefit for other people, compete at recreational level, virtue of care.	Status: develop integrity, slow down productivity, explore life, virtue of wisdom.
Focus on: creating habits, teaching basic skills.	Focus on: skills development and having fun.	Focus on: introducing local competition and fair play.	Focus on: mental preparation, transition to specialised training.	Focus on: advanced mental preparation, strengthen ethical approach.	Focus on: developing high performance.	Focus on: social environment.	Focus on: keep seniors active.



Overview "handball skills needed"

Kindergarten Handball	Mini Handball	Basic Handball	Youth Handball	Junior Handball	Senior Handball	Master Handball	Recreational Handball
None.	No specialised technical, tactical and condition training. Basic positions can be taught.	Further knowledge of technical-tactical foundation. Lay down fundamental skills of handball.	Specific attack and defence position training. Maintain general knowledge. Broaden fundamental skills.	Adapt to chosen positions. Extend knowledge of each position in attack and defence.	Master skills of playing handball. Higher level of teamwork, improving effectiveness, etc.	None.	No special handball skills needed. Basic movement. Walking instead of running.

Overview "beach handball skills needed"

Kindergarten Handball	Mini Handball	Basic Handball	Youth Handball	Junior Handball	Senior Handball	Master Handball	Recreational Handball
Same as for indoor, uneven surface (sand) develop physical and coordinative abilities in joyful and alternative way.	Same for indoor; additional training / challenge on balance and differentiation (sand).	Clear difference between "handball on sand" and "beach handball" necessary.	"Variable play needs variable training", beach handball will develop general handball skills.	Either as attractive / joyful alternative or competitive (needs specific adaptations).	Clear specialisation on individual level necessary.	Sand reduces risk of injuries in moving and falling significantly.	Simplification of the game recommended, can help balance ability.



Overview "small sided games / playing forms" $\,$

Kindergarten Handball	Mini Handball	Basic Handball	Youth Handball	Junior Handball	Senior Handball	Master Handball	Recreational Handball
Small sided games / workshops (see EHF	GOALCHA Street Handball.	GOALCHA Street Handball.	GOALCHA Street Handball.	GOALCHA Street Handball.	None.	GOALCHA – five-a- side.	GOALCHA – five-a- side.
Kindergarten Handball Manual – coming in September 2022).	Handball-at-School.	Handball-at-School.	Handball-at-School.	Handball-at-School.			Walking Handball.



Overview "competition forms"

Kindergarten Handball	Mini Handball	Basic Handball	Youth Handball	Junior Handball	Senior Handball	Master Handball	Recreational Handball
None.	U6-U8: Regional competitions / festivals	Regional competitions / festivals	Regional competitions			None.	See small sided games / playing forms.
	Playing court: 20x10m	Playing court: 40x20m	Playing court: 40x20m	Playing court: 40x20m	Playing court: 40x20m		
	Goal size: 160cm x 250cm	Goal size: 200x300cm	Goal size: 200x300cm	Goal size: 200x300cm	Goal size: 200x300cm		
	Ball size: 13-14cm, diameter, soft material	Ball size: 13-14cm diameter, synthetic / leather	Ball size: 1	Ball size: 2 / 3	Ball size: 2 / 3		
	Playing time: 2x10min. score is not counted; every player must play min. 5 minutes (automatic signal).	Playing time: 2x20min. Score is only counted for U12-13 Every player must play at least 10 minutes (automatic signal).	Playing time: 2x20min. every player must play at least 10min. (automatic signal).	Playing time: 2x30min.	Playing time: 2x30min.		



Overview "coaches' profile"

Kindergarten Handball	Mini Handball	Basic Handball	Youth Handball	Junior Handball	Senior Handball	Master Handball	Recreational Handball
Kindergarten teacher, parents, coaches, players. Exercises should be fun and versatile, handball as a game is not important, create a positive and safe atmosphere. Planned for 2023: EHF Kindergarten Handball Course.	Handball instructors. Managing and directing the group, understanding of basic handball rules necessary. Planned for 2023: EHF Mini Handball Course.	Handball Coaches level I. Coaching theory and skills, basic handball skills ability to plan and implement an exercise package, deeper grasp of the rules, abilities to activate children and parents. Planned for 2023: EHF Grassroot Coaching Course.	Handball Coaches level II. Coaching theory, development, leadership, how to coach a team, game understanding, goalkeeper training.	Handball Coaches level II. Coaching individuals, coaching theory, comprehensive developer of features, taking responsibility for developing into a top player, principles of team play, etc.	Handball Coaches level III / Master Coach / Pro license. Professional activity as a coach, supporting athlete development.	Good knowledge that body changes with age, good motivator / leader to keep athletes in our sport.	None.



2. **NEUROSCIENCE IN EDUCATION AND SPORT**

Child development

Growth and development are most turbulent at the pre-school age, i.e. development is at its peak until the age of 3, but its pace remains accelerated until the age of 6 (Kamenov, 2008). Every stage in child development is marked by development in the social, emotional, cognitive and physical domain (Berk, 2007). Together with inborn genetic factors, novel experiential inputs and behavioural responses act on a still immature brain substrate to stimulate the further development of neural circuits, and with time, experience has an increasingly more prominent function in the shaping of neural circuitry (Tau & Peterson, 2010). Although brain size does not undergo drastic changes in the so-called "plateau phase" of development, i.e. between the ages of 2 and 5, myelination and synaptic remodelling are particularly active (Tau & Peterson, 2010). Medical studies have shown that overall brain metabolism rises to twice that of adult levels by 4-5 years of age and remains high until 9-10 years of age (Tau & Peterson, 2010). According to the theory of integral development (Gruber & Ismail, 1967), there is a correlation between motor, cognitive and emotional development. This correlation decreases with age, which is why it is easier to exert influence on one domain of development through two other domains at an early age. Therefore, the domains of a child's development are not independent of each other, and progress in one domain often impacts progress in other domains – which is especially the case with the development of motor abilities in early childhood (Trajkovski, Tomac, & Marić, 2014). The need for different kinds of physical activity is a basic human need and it is particularly prominent in childhood (Kamenov, 2008), and at the pre-school age, it has a vital role in physical, social, and psychological wellbeing (Strong et al., 2005).

The correlation between motor and cognitive function

The idea that motor and cognitive development is correlated is not new. Piaget held that sensorimotor experiences are critical to cognitive development (Piaget, 1953). Furthermore, Bushnell and Boudreau suggested that motor development functions like a control parameter for further development. If we draw a simple analogy and say that sessile organisms do not have neurons or nervous systems, whereas mobile organisms have a nervous system, it is clear that upright gait and movement are important characteristics of human beings, and that movement is critical to brain development. This is particularly important for children as the brain develops most by the age of 5 (Rajović, 2010), which is why walking and running have to be one of the main activities for a child (Rajović, 2010, 2016). A lot of research has been conducted to date in view of examining and understanding the potential correlation between motor and cognitive skills in children, as well as adults. Numerous studies have shown that the development of motor abilities impacts cognitive development (Aron, Poldrack, & Wise, 2009; Chaddock-Heyman et al., 2016; Chaddock et al., 2010, 2012; Erickson, Hillman, & Kramer, 2015; Hillman et al., 2009; Hopkins, Davis, VanTieghem, Whalen, & Bucci, 2012; Koziol et al., 2014; Sibley & Etnier, 2003).

Pillars of the NTC program

The NTC Program is a program of activities designed to promote the development of motor and cognitive abilities among pre-school- and school-age children, and it rests on the research findings in the field of neuroscience and pedagogy. The aim of the program is to develop functional knowledge and creativity by increasing divergent production and practicing information, i.e. knowledge integration. According to the basic premise of the NTC methodology, motor development plays an important role in the cognitive development of a child, and certain problems (such as learning disorders, concentration problems and attention deficit) can be a consequence of inadequate motor development and overall modern lifestyle trends which often entail little physical activity. The second premise at the core of the NTC program states that early childhood is the most important period for brain development, which is why implementation of the program rests on development of motor abilities and promotion of physical activity in pre-school-age children. The NTC program is implemented in three phases.

The key element of the first phase are evolutionary accordant activities, characterised by complex motor abilities that include elements of fine motor skills, dynamic eye accommodation, rotation, balance and movement. These activities activate large regions of the cerebral cortex and stimulate their interconnectedness, which consequentially aids cognitive development.

The second phase of the NTC program implementation is characterised by the abstract classification, abstract seriation and association. Associative learning promotes development of cognitive skills such as reasoning, comprehension, memory, synthesis, transfer of learning, etc. (Rajović, 2011).

The third phase covers the development of divergent and convergent thinking, as well as functional knowledge. All three NTC program phases are implemented through play, which, as the intrinsic motivation of every child, constitutes the key factor in NTC program implementation (Rajović, 2011).

The three phases encompass sensorimotor and cognitive development in children (Rajović, 2010).



References:

Aron, A. R., Poldrack, R. A., & Wise, S. P. (2009). Cognition: Basal ganglia role. Encyclopedia of Neuroscience, 2, 1069–1077.

Berk, L. E. (2007). Development through the lifespan. Allyn and Bacon: Boston, MA.

Chaddock-Heyman, L., Erickson, K. I., Holtrop, J. L., Voss, M. W., Pontifex, M. B., Raine, L. B., et al. (2014). Aerobic fitness is associated with greater white matter integrity in children. Frontiers in Human Neuroscience, 8, 584 (DOI=10.3389/fnhum.2014.00584).

Chaddock, L., Erickson, K., Prakash, R., VanPatter, M., Voss, M., Pontifex, M., et al. (2010). Basal ganglia volume is associated with aerobic fitness in preadolescent children. Developmental Neuroscience, 32(3), 249–256.

Chaddock, L., Hillman, C., Pontifex, M., Johnson, C., Raine, L., & Kramer, A. (2012). Childhood aerobic fitness predicts cognitive performance one year later. Journal of Sports Sciences, 30 (5), 421–430.

Erickson, K., Hillman, C., & Kramer, A. (2015). Physical activity, brain, and cognition. Current Opinion in Behavioral Sciences, 4, 27–32.

Gruber, J., & Ismail, A. (1967). Integrated development, motor aptitude and intellectual performance. Columbus: Charles E. Merrill Books.

Hopkins, M., Davis, F., VanTieghem, M., Whalen, P., & Bucci, D. (2012). Differential effects of acute and regular physical exercise on cognition and affect. Neuroscience, 215, 59–68.

Hopkins, W., Marshall, S., Batterham, A., & Hanin, J. (2009). Progressive statistics for studies in sports medicine and exercise science. Medicine Science in Sports Exercise, 41 (1), 3.

Ismail, A. H. (1967). The effects of a well-organized physical education programme on intellectual performance. Research in Physical Education. 1 (2). 31–38.

Kamenov, E. (2008). Vapitanje predškolske dece (Education of preschool children). Belgrade: Zavod za udžbenike. In Serbian

Koziol, L., Budding, D., Andreasen, N., D\(\textit{Larrigo}\), S., Bulgheroni, S., Imamizu, H., & Pezzulo, G. (2014). Consensus paper: the cerebellum\(\textit{Us}\) s role in movement and cognition. The Cerebellum, 13 (1), 151–177.

Piaget, J. (1953). The origin ofintelligence in the child. London: Routledge & Kegan Paul.

Plahutar, A., & Rajović, R. (2015). Primjena NTC programa u poticanju razvoja složenih motoričkih sposobnosti predškolske djece (The application of the NTC program to encourage the development of complex motor skills of preschool children). International Conference Identifying the Gifted and How to Work with Them in Pre-school Institutions and Primary Schools, Book of Proceedings (pp. 237–246). Ljubljana: Faculty of Education University of Ljubljana. Rajović, R. (2010). NTC sistem učenja: metodički priručnik za vaspitače (NTC learning system: methodical manual for teachers). Vršac: College of Professional Studies in Education of Teachers Minisjle Palov. In Serbian

Rajović, R. (2011). IQ deteta – briga roditelja, predškolski uzrast. Deo I (IQ of a child - Concern of parents, preschool age. Part I). Novi Sad: Abeceda. In Serbian

Rajović, R. (2016). Kako uspešno razvijati IQ deteta kroz igru – NTC sistem učenja (How to successfully develop a child's IQ by playing - NTC Learning System). Novi Sad: Smart production. In Serbian

Rajović, R., Štenovec, L., & Berić, D. (2015). NTC method implementation in the development of early motor abilities. In: S. Pantelić (Ed). XVIII Scientific Conference "FIS Communications 2015" in Physical Education, Sport and Recreation and III International Scientific Conference. Niš: Faculty of Sport and Physical Education.

Sibley, B., & Etnier, J. (2003). The relationship between physical activity and cognition in children: a meta-analysis. Pediatric Exercise Science, 15 (3), 243–256.

Strong, W., Malina, R., Blimkie, C., Daniels, S., Dishman, R., Gutin, B., et al. (2005). Evidence based physical activity for school-age youth. The Journal of Pediatrics, 146 (6), 732–737.

Tau, G., & Peterson, B. (2010). Normal development of brain circuits. Neuropsychopharmacology, 35 (1), 147–168. Trajkovski, B., Tomac, Z., & Marić, Ž. (2014). Trend in motor skills development among preschool children as affected by a kinesiology program-longitudinal study. Sport Science, 7 (2), 22–27.



3. INTRODUCTION TO MODIFIED GAME FORMS IN HANDBALL INITIATIVE / PRACTICE

There is a wide variety of game constructs to introduce beginners to handball and to progress to a more complex and demanding game and finally to the full game. While this ideal development from the simple to the complex is highly desirable, with gradual progression of modifications designed to exaggerate particular tactical principles, the different mini handball constructs have deep sporting cultural roots and can be clearly identifiable.

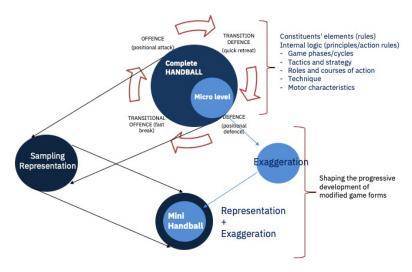


Illustration of pedagogical principles (sampling, representation, exaggeration, complexity) that underpins the design of a modified game form, such as Mini handball. Inspired by Teaching Games for Understanding (TGfU) Approach.

The mini handball rules applied (including defensive orientations) provide a structure for the game to occur, since it modulates the nature of the opposition, game problems and closely constrain the individual and group which enable beginners to cope with emergent challenges. They are all concerned with **solving game problems** in which one part (at individual or group level) attempts to reach supremacy over the others to achieve their own goals.

As a result, the game presents itself a succession of problem situation, including (inter) action, cooperation and opposition, with different situational constraints depending on the relationship of the forces that it generates between the teams, modulated through the numerical relationship between attackers and defenders versus the size of the court, defensive behaviour employed, cycle/phases and sequence/interdependence of game actions. Thus, the game formats used in the initiation should be seen as fertile scenarios in options of (inter)actions that promote learning and development of game skills. Therefore, it is important to take into account the game cycle, sequence or phases and behaviours that each format

inhi

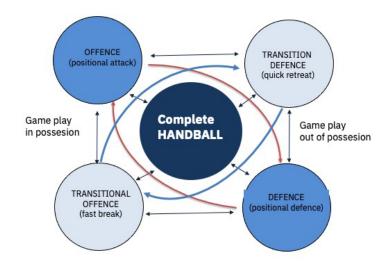


Illustration of handball (sub)phases that underpin the design of different Mini Handball constructs, with some focusing the fast break and others the positional play.

The recommendations provided by EHF are aimed to guide professional practice in both teaching and coaching, where a framework is presented on how to modify and design the game according to the needs and development of players.

Changing and shaping the rules of the game is of utmost importance to make the game accessible to inexperienced and low-skilled players, such as the size of the court, the goal, the ball, the system of scoring, the number of players on the court (and their roles), and the ratio of forces between teams (attack versus defence). However, it is much more than that, it is to bring joy, satisfaction, and meaningful, challenging and powerful experiences.

It should also be highlighted that a safe, challenging and developing environment should be created that encourages lifelong handball practice, where beginners not only acquire knowledge of handball but also develop good friendships and respect for each other's diversity.



Game architectures matter

Game architecture encapsulates arbitrary problems and solving these problems should arouse feelings of autonomy, self-efficacy and satisfaction, which young children find exhilarating and pleasurable. Careful selection of a mini handball format, respecting the beginner's psychomotor and affective developmental stages, is of primary importance.

Key pedagogical principles to design modified game forms for beginners

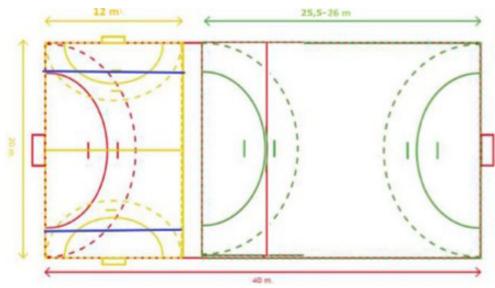
The key features of this analysis centres on the structural rules that provide a functional construct for the game to occur. It involves introducing game concepts and strategies, exaggerating, channelling and focusing game problems and creating situational opportunities to develop game skills and an understanding of the game's tactics.

Types of modifications:

- Number of players. The fewer players involved in the game, the more opportunities there are for each to be included in the game play. Less players also aids to reduce complexity.
- Attackers-to-defenders ratio. Less players and/or offensive numerical advantage reduces complexity and is much easier for beginners to cope with.
- Size of the court. Reducing its size, typically leads to more game control, facilitates shooting and less (adjusted) physical intensity and effort.
- The ball. Typically, softer and larger handballs are easier to catch/receive and to stop by the goalkeepers; small and lighter handballs are easier to manipulate and to throw; and bouncier handballs are easier to control when dribbling.
- The goal. Reducing its size (height and width) makes the duel between the shooter and the goalkeeper balanced or fair.
- The goal area. Decreasing its dimension (typically ranging from 4 to 5 meters) or shaping it (semi-circle or a rectangle made by a straight line) is expected to positively affect the shooting success.
- Organisational and action rules. There is a wide variety of possibilities to aid the game flow, control and greater individual and team success. Through game constraints the selection of certain tactics, actions or behaviours might be eliminated or focused on.

GOALCHA™ BALL

In addition to being purpose-built for beginner's play, soft balls invite prolonged inter-passing play. Providing small-sized balls also facilitates ball gripping, forming the basic throwing position, developing correct and diverse throwing motor patterns in a more "flexible and adaptable" way, and helps to develop wrist mobility and grip strength (leading to speed increase).



Representation of different court sizes that can be used in handball initiation and practice

A framework for inclusive play and active participation



- · Ensure appreciation and understanding of the modified game form
- » Encourage all players to play in attack and defence and in all roles and positions (including goalkeeping)
- Provide a safe playing environment
- » Discourage body contact (use the protected ball rule) and introduce action rules to constrain defensive behaviour (see GOALCHA™ Street Handball concept).
- » Use softer handballs to protect the goalkeepers and to facilitate ball catching (such as GOALCHA™ ball or sponge balls); when using regular balls, action rules might be introduced to facilitate ball reception (e.g., allow bounce pass only) and to protect the goalkeepers, such as restricting the type of throw (e.g., allow bounce shooting only).
- Use defensive constraints with pedagogical criteria to slow down the game actions to facilitate action control and quality.
- » Provide more space-time for players to read the play, make smart decisions and execute actions (with and without the ball) through using action constraints, such as restricting defensive actions to defensive half-court or near goal area line.
- Provide maximum opportunity to receive and throw the ball with success, thereby achieving a feeling of participation in the game's action and self-confidence.
- Increase the opportunity for cooperation and teamwork (inter-passing actions)
- » Reduce the number of players/roles (3 to 4) and use offensive numerical advantage.
- » Require ball passing among all teammates before a goal attempt can be made.
- » Constrain or ban dribbling to enforce ball handler to read the playing scene (e.g., is there an open lane or open shooting opportunity?) before anything else.
- » Restart the play from the goal area after a goal and ban intercepting the first pass or until crossing the midcourt line (for example).
- · Provide more opportunities for success and recognition of achievement
- » Provide more opportunities to score (e.g., use fewer players and smaller courts where the goals are easily reached).
- » Reduce the goal area to provide more success in scoring attempts (i.e., throwing closer to the goal).
- » Reduce the goal to make the duel between the shooter and the goalkeeper balanced or fair; when using an official goal, its height can be adjusted with a simple rubber ban attached to the goalposts, but other options can also be tried, such as banning the lob shots or using bounce shooting only.
- » Use differential scoring systems to help or involve the less experienced/skilful (e.g., the same player is not allowed to score twice in a row, the first goal of each team player is awarded three points, or, after a score, there is a mandatory switching with a bench player).

• Make the game less strenuous

- » Provide small-sized courts (appropriate to the age and experience of players).
- » Use shorter playing time (limiting the time of games reduces the endurance demands, keeps score closer, and preserves player enthusiasm).
- » Introduce a rotational system between the court and bench players (e.g., after a shooting attempt).



4. KINDERGARTEN HANDBALL (AGE 3 — 5 YEARS)

4.1. Physical aspects

STATUS

Physical activity is essential for healthy child development. Physical activity should be fun and a part of the child's daily life and it is the basic to lay the foundation for lifelong physical activity. Active play is the way young children are physically active.

It helps to build strong bones and muscles, improves flexibility, develops good posture and balance, improves fitness, reduces stress and improves sleep.

Phase of rapid motor development with more obvious perfection of various forms of movement and the appropriation of first movement combinations. It is necessary to exploit the urge to move and curiosity to learn many different movements.

This is a stage of critical brain development. Active play is key at this stage as it builds important connections in the brain and between the brain and children's muscles. Repetition of rhythmic activity allows brain-muscle connections to be strengthened. At this stage children begin using their imagination, as well as developing understanding, memorisation and movement presentation.

FOCUS

In the first stage of long-term performance development (kindergarten handball), it is important to convey general enjoyment of movement and specifically to arouse interest in and with balls (see 3.2. Handball skills).

Focus on improving basic movement skills such as running, jumping, crawling, climbing, balancing, hanging, swinging, pulling, pushing, carrying, throwing, catching, kicking... inventing movement stories or built parkours. These basic human movements are the building blocks for more complex activities.

Coordinative skills should be given high priority in any children's training session. A special focus should lay on balance exercises (e.g. standing on one leg or unstable devices).

Design activities that help children feel competent and comfortable participating in a variety of fun and challenging games and activities.

4.2. Mental / social aspects

The focus for children between the ages of 3-6 are the acquisition of basic skills and the creating habits that build the foundation for physical and social development.

Children start the slow process from complete dependence on others towards independence by "discovering the world" through small group activities, with very simple targets, explicitly defined and clarified.

The child is developing physically, becomes more mobile and is discovering that they have many skills and abilities, such as putting on clothes and shoes, playing with toys, etc. Such skills illustrate the child's growing sense of independence and autonomy.

For example, during this stage, children begin to assert their independence, by walking away from their mother, picking which toy to play with and making choices about what they like to wear, to eat, etc. (in case of sport/handball sessions: putting props in their places after use, putting on equipment and taking it off, changing shoes).

Rather than put on a child's clothes, a supportive parent should have the patience to allow the child to try until they succeed or ask for assistance. (coach: allow the child to do it by themselves, if they need assistance – offer it) So, the parents need to encourage the child to become more independent while at the same time protecting the child so that constant failure is avoided.

A delicate balance is required from the parent/coach, as the child must be allowed to have enough room for learning through trial and error method. They must try to avoid doing everything for the child, but if the child fails at a particular task, they must not criticise the child for failures and accidents (particularly when toilet training). The aim has to be "self-control without a loss of self-esteem" (Gross, 1992).

If children in this stage are encouraged and supported in their increased independence, they become more confident and secure in their own ability to survive.

If children are criticised, overly controlled, or not given the opportunity to assert themselves, they begin to feel inadequate in their ability to survive, and may then become overly dependent upon others, lack self-esteem, and feel a sense of shame or doubt in their abilities.



During this period, the primary feature involves the child regularly interacting with other children at kindergarten/training sessions. Central to this stage is play, as it provides children with the opportunity to explore their interpersonal skills through initiating activities. Group/team work being the environment in which every child contributes with his/her behaviour focused on mutual/common achieving, rather than self-oriented.

Children begin to plan activities, make up games and initiate activities with others. If given this opportunity, children develop a sense of initiative and feel secure in their ability to lead others and make decisions.

It is at this stage that the child will begin to ask many questions as his/her thirst for knowledge grows, and their curiosity needs to be understood. Guilt is a moral emotion that will, at some point, also be experienced by a child, and the adults need to have an understanding of what it actually is, to be able to adequately help a child. Children who experience guilt interpret mistakes as a sign of personal failure and feel that they are somehow "bad". Explain to a child that a mistake is an experience, a learning point, not something that makes them "bad". A child who feels more guilt than initiative at this stage, learns to resist trying new things because of fear of failing. Too much guilt can make the child slow to interact with others and may inhibit their creativity. Success in this stage will lead to the virtue of **purpose**, while failure results in a sense of guilt.

A quality training session in a safe environment: physically, mentally and social-emotionally, with an accent on socialising, tutoring, integrating and belonging – as being of great significance at this age category.

4.3. Handball skills (technique / tactics)

In the years following birth, infant reflexes are constantly relegated to the background and by the age of 3, innate instincts are increasingly being replaced by conscious actions and thus conscious movement control. This period coincides with another milestone for the child in joining an out of family-community and getting involved with new faces at kindergarten. With time spent in this new environment, training and exercise in a structured framework will accelerate the development of general then later specialised sports skills.

The regular attendance of pre-school and the daily social connection with teachers, carers and peers challenges the child to control his/her behaviour. At this age children are very much driven by emotions; however, the general, instinct reactions need to be channelled into a more rational manner in order to fit in a certain group. Two crucial facts about children's actions are: the tendency to imitate and the pursuit of independence. Also, they try to push their boundaries, do things that are forbidden and wait for the effect. At the same time, they are more persistent in the action if the task is interesting to them.

Being aware of these age characteristics, a certain amount of structured skill development is already possible and this in the following age groups will increasingly take the handball player of the future into the direction of specialised sports training.

Recommended workshops: 1-2 per week

Aim: To develop the sense and joy of movement and awaken the desire to play sport by:

- creating a positive attitude towards movement and play
- refining the neuro muscular system
- creating self-confidence and self-awareness
- establishing social connections as a basis for team play
- developing harmonious coordination between eyes and limbs, body and limbs
- inhibiting infantile reflexes, encouraging voluntary actions
- improving motor learning abilities
- forming body consciousness and awareness
- · creating the feeling of success while playing together
- · learning to use and manipulate the playing equipment

In this age category the technical-tactical training manifests itself in a complex manner: while playing games, the main focus should be set on movement coordination and skill training then transferring knowledge and acquiring attitude through playing games.

TECHNICAL TRAINING

Since the children at this age have the tendency to imitate movements copying animal walks and movements, taking certain body positions while stationary and then while moving, creating a mirror-image of shown motions helps to shape self-image and body awareness.

Crawl-climbing exercises help to develop the cross-movements of the body and limbs which are essential for performing the basic sport movements of running, jumping and throwing.

In order to develop the sense of balance, walking on certain lines or uneven surfaces, stepping up and jumping down from low objects or walking up and down on the stairs with alternate legs can be used well.

Children like skipping and hopping and with guided teaching, they can learn to distinguish between doing it with one and on both legs in basic position and while moving.



In the case of running, the first goal is to minimise the ground contact of the steps and then to increase the length of the steps with the aim to create a smoother and more economical technique for the future.

To direct the child towards handball in the future, it is essential to lay down the basics for catching and throwing skills. Catching balls of different sizes and weights with both hands and then throwing them away for a certain distance or purpose with two or even one hand is a good introduction to later specialised training. While longer ball control and movement coordination can be developed equally well and together with various bouncing and dribbling exercises when the players run around cones, obstacles and follow geometrical shapes.

TACTICAL TRAINING

Targeted tactical training in this age group should not yet take place. We need to be satisfied children are able to learn the rules of different small games, can understand the purpose of the games, can differentiate between achieving a certain goal or preventing others to get it. Initial steps to introduce the concept of attack and defence can be taken with the exercises when a team has to achieve certain points or to gain some ground together.

In these exercises the sense of co-operation and task sharing as vital elements of group work need to be developed well. These social skills then will later on provide the basis for introducing the concept of teamwork and team play.

The children's need for independence can be put to good use to some degree of individual training. However, they do not like targeted, perhaps monotonous, repetitive exercises. Since their attention is not yet persistent and they get quickly tired of things soon, certain tasks need to be repeated regularly. Therefore, the main task of this period is not so much the teaching / learning of special technical-tactical elements, but rather the increasingly secure implementation of the basic human movements.

By developing these abilities, we not only improve children's motor skills, but also enable them to acquire those skills and behaviours (patience, tolerance, concentration, discipline) that provide better academic learning outcomes for them when they go to school.

4.4. Beach handball skills (technique/tactics) and beach handball training at kindergarten handball

No big differences are necessary; in this age group the specific skills and the training of the beach handball discipline are the same for indoor and beach. The mental and social aspects, as well as the first technical/tactical aspects mentioned in 3.2., play the same role in kindergarten beach handball. Even more, the uneven sand surface could be used to foster and develop the described physical and coordinative abilities in a joyful and alternative way.

Summarising this means nothing should be trained differently, but if it is possible (if beach courts are available) all activities, playing forms and games should also take place on sand. The uneven and unpredictable surface make all movements and actions more complicated at the beginning, but it triggers in particular the balance abilities as well as the coordination of the whole-body movement. Falling does not hurt on the soft surface, children feel more confident in what they are doing. Throwing and catching of several objects (e.g., different ball materials and sizes) are one of the major topics to learn, these abilities have implicitly a special focus in acting on sand, because bouncing of a ball is nearly impossible.

In general, the recommended ball in this age group is the methodical ball (for example GOALCHA); this ball is pliable, easy to catch and throw and does not hurt.

Furthermore, the positive aspect of doing activities outdoor on sand in sunny weather conditions could have positive impact on the enjoyment of the children in the participation in handball activities.

4.5. Small games / playing form

Workshops with different stages, focused on proper physical movement, including running skills, and coordination. The workshop sessions should tell a story and take place in a "universe" created for the children. For more information and exercises, see the "EHF Kindergarten Handball Manual".

FUN SKILL CHALLENGES – EXPLORATORY AND POWERFUL PLAY

Play is more than just a chance to have fun – it is a serious matter regarding a child's learning process, development, well-being and heath. The many forms of play enrich a child's brain (brain structure and functionality), develops foundational functional and motor skills in meaningful and powerful ways.

A huge variety of active fun skill challenges and group games exists that are great for building fundamental motor (body and space awareness) and affective-social skills and also have many other benefits – stimulates general cognitive development, concentration, problem-solving abilities, creativity, etc.

Make games with very simple rules and objectives, which include chasing, dodging, avoiding, and awareness of space and others. Allow exploiting diverse ball types and other objects; stimulate experience with various motor skills and ball skills, such as travelling with a ball, throwing and catching.



LEAD-UP GAMES/MINOR GAMES

- Chasing and fun games ("giant dragon", "hot lava", "dragon's tail", "octopus", "pirates and townsmen", "tail tag", "cat and mouse", ball tag", "fox and geese", etc.).
- Target games ("dodgeball", "hit the pin", "bean bag toss", "cleaning-the-hose", etc.)
- Territorial games ("shark game", "pirate's treasure").
- Child-designed games. From a very young age, children begin to enjoy games with rules and invent their own.

LOCOMOTION AND BODY SKILLS

Simulating animal walks (moving freely or with an obstacle course, etc.), "shadow partner", etc.

AGILITY, BALANCE, COORDINATION AND MANIPULATIVE SKILLS

- · circuits with huge diversity of movements and body actions
- diverse manipulative and partner challenges/games with diverse balls and other objects ('balloon toss', etc.)

PHYSICAL, LOCOMOTOR AND ROUGH-AND-TUMBLE PLAY

Most children like rough-and-tumble play (climbing over each other, wrestling, rolling around, etc.) because it is fun. This kind of play helps to develop body awareness, allowing them to exploit their changing position in space and get aware of the limits of their strength. This type of physical play can also be practised by disputing a grabbed ball, one-on-one, on the floor.

WORKSHOP FORM

Handball days or festivals, involving the parents, families, teachers and coaches where:

- girls and boys participate in workshops / small games
- · where the result does not matter
- · fun over winning
- apart from modified handball playing small games

Regular organisation in workshops. See "EHF Kindergarten Handball Manual".

4.6. Workshop leader / coaches' profile

Education level: Kindergarten teacher

The content of the demands regarding the physical education from handball point of view:

- in the planning of activities, attention is paid to social, physical and psychological aspects as well as to the child's age and developmental level
- exercise should be fun and versatile
- handball as a game is not important here, it is just a simple activity where the ball is in the hands with throwing/passing elements on top of running, jumping – the kindergarten teachers need to know the game of handball that he/she can support our game
- small and simple games where children can use their imagination and where the rules are 'flexible'

Hints:

- feedback after error when the child has time to hear you
- language keep it very simple!
- · do not interrupt the exercises/games, only if there is a huge mistake
- be positive
- body contact with children is very important (showing how to throw, for instance)



5. MINI HANDBALL (AGES 6 — 9 YEARS)

5.1. Physical aspects

STATUS

The second stage of long-term performance development includes the beginning of the first Golden Age of learning. Children start with school and are able to learn and to absorb and process information.

This stage it marked by a rapid increase in motor development - the CNS (central nervous system) has already more than 90% of its final dimensions.

Children have a pronounced liveliness and mobility and we should start to concentrate on the quality of determine activities (rough and fine form). They have strong emotionality in learning so training must be motivating and enable success.

Training should include many movement experiences (polysportivity/multilateral training). It is a good age to develop ambidexterity (using both hands / feet with equally).

Do not be afraid of overloading! Overload only occurs for forced stimulations.

FOCUS

In this second phase of long-term performance development, the focus should lay on general and overall development.

Main content is a qualitative advancement of basics on athletics (running, jumping, throwing...) combined with agility, experience focused coordination, neuromuscular speed and general strength with body weight exercises focusing on the movement technique.

The training should be child-friendly, versatile, not sport-specific but still goal-oriented movement, playing and doing sports! Target: arouse joy in sport. Endurance is developed "on the side" in games.

Strength

Game and fun focused training: climb, run, jump, land, throw, catch, lift, pull, etc. Introduction to informal circuits using body weight exercises, a partner or light medicine ball.

Endurance

Takes place parallel and unnoticed with other conditional skills (develop power through games).

Speed

Experience and game focused with a wide variety of balls, hoops, ladders, cords. Enable fast movement through training - do not demand it! Playful - frequency-focused – unnoticed.

Coordination

Fun and game oriented, with a wide variety of balls, clothes, newspapers, clubs, hoops, ropes... Using equipment landscapes (e.g. parkour), climbing, balancing, a variety of rackets, a variety of sports, on the playground, in nature, in the water, partner exercises, etc.

5.2. Mental / social aspects

(Boys approximately 6-9 years old, girls approximately 6-8 years old)

- Develop fundamental movement skills, with emphasis on participation and having fun on a daily basis.
- Introduce simple rules and etiquette of sport, with a focus on fair play and respect for others.
- · Provide and respect children's activity choices.
- Competition should be informal with no record of results.
- Children transition from foundational development to learning skills (social skills, life skills and sport specific skills) and strategies (related to problem-solving and tactical skills related to sports).
- Learn by doing. This is a time when children enter school and start to acquire knowledge and skills.
- Teachers/coaches begin to take an important role in the child's life as they teach the child specific skills.

It is at this stage that the child's peer group will gain greater significance and will become a major source of the child's self-esteem. The child now feels the need to win approval by demonstrating specific competencies that are valued by society and begin to develop a sense of pride in their accomplishments.

If children are encouraged and reinforced for their initiative, they begin to feel industrious (competent) and feel confident in their ability to achieve goals. If this initiative is not encouraged, if it is restricted by parents or by the teacher or coach, then the child begins to feel inferior, doubting his/her own abilities and therefore may not reach his/her potential.

Some failure may be necessary so that the child can develop some modesty. A balance between competence and modesty is necessary. Success in this stage will lead to the virtue of competence.

The focus is on skills development and having fun!



5.3. Handball skills (technique and tactics)

A more structured and more specific handball training can be started at the age of 6 or 7 with the introduction of 3+1 or 4+1 mini handball games, adapted to the size and characteristics of this age group. The simplified game, the relatively unrestricted playing manner, the re-occurring feeling of success and the social relationships all contribute to whetting the children's appetite to acquire the skills of handball and to regularly attend practice.

Thus, from the age of 8 or 9 it becomes possible to increase the size of the court and consequently the number of players as well as to lay down the fundamental skills for playing handball within the framework of structured trainings. The acquisition of basic technical and tactical elements further increases the children's confidence and feeling of success. Furthermore, basic condition training introduces their bodies to regular exercise, so it becomes possible to further extend the players' level of knowledge.

Recommended training sessions: 1-2 per week - participation orientated

Aim: To make handball enjoyable and appealing to the child by:

- making the children understand the basic idea of handball
- introducing the concept of playing as a team
- creating the right playing attitude
- highlighting the importance of fair play
- emphasising the enjoyment of the game over the result
- giving boys and girls the opportunity to play together
- introducing organised training sessions
- · refining the technique of running
- developing the correct throwing motion
- improving eye-to-ball coordination
- establishing a sense of positioning
- increasing the awareness of peripheral vision

In keeping with the aims, it is not practical to start a specialised technical, tactical and condition training at this age. Rather, children should be given the possibility to let their natural abilities, perhaps hidden talents, come to the surface while playing games. During exercises, playing games and modified handball, children should only be required to keep the simple predetermined rules and to behave according to the norm of social etiquette.

To give children a proportional playing environment according to their size and knowledge, it is important to reduce the size of the playing court and the number of the players as well as to change the circumference and the material of the ball and to modify the playing rules. With the introduction of mini handball, the children's interest can be set alight so that they are keen to continue playing and practise handball in a more structured manner.

TECHNICAL TRAINING

To be at ease on the court, the young player needs to learn both the basic defensive and offensive positions so that from these he/she is able to move quickly in any direction and at any given moment.

During relays and simple running exercises, players should practise to start rapidly, to change direction in a circular path and to stop by bracing then by jumping.

To be a part of the game necessitates familiarity with ball handling skills such as catching, holding, passing and dribbling. Catching on-coming balls above the head, below the waist and at chest level in basic position, face-to-face and from either side should be practised with the upper and lower catching techniques.

Holding the ball securely is important so from the beginning it should be mastered with one and with both hands.

Passing exercises should be executed with continuous footwork in pairs and for short distances. In the beginning, it is practical to master the two-handed chest and lower passes; then gradually learn the correct technique for the overarm pass. Ball exercises should eventually reach the stage where the young player after catching, is able to prepare the ball into the throwing position in a straight path with the help of the other arm in one fluid movement.

In order to keep the ball under control over a period of time, players should first start to practise dribbling in a basic position and then extend to high dribbling with alternate hands while moving.

When practising shooting, the young player should learn to build momentum with the simplest cross step while preparing the ball for throwing and then master the correct throwing motion of the overarm shot.

TACTICAL TRAINING

When attacking against an unsettled defence, players should attempt simple fast break mainly with direct pass (direct fast break) or with a second forward pass (indirect fast break). Against an organised defence, players should try to create scoring positions mostly with mobile attack while finding the right balance between individual success and collective play.



In defence, players should master distant marking as a basic element of one-on-one defence and use it effectively when there is pressing in the dangerous area. Furthermore, individual forms of zone defence should be introduced to the players, highlighting the basic principles and function of the defence wall.

Taking into consideration the physical and psychological development of this age group, the basic skill should be predominantly developed. This is at the stage when children are most predisposed to learning new movements. Once again, the main focus should be still on movement coordination because later on this cannot be substituted and this ability impacts on the whole sporting career of the child.

An effort to develop skill to a high level should be made so that through this, other sporting abilities of strength, agility and endurance are also improved. The training programme should be composed to include exercise for developing both general and specific handball skills. Therefore, when planning the practice, the games played in physical education lessons such as relays, ball games, chasings and so on as well as gymnastics and athletic exercises can be well utilised. Running relays are particularly suitable for developing sporting abilities in a complex manner because besides developing running and ball handling skills, they provide a good work-out and encourage a healthy competitive spirit without body contact.

5.4. Beach handball skills (technique/tactic) and beach handball training at mini handball

As in the level of kindergarten handball and kindergarten beach handball, no massive differentiations are necessary between the training of indoor and beach handball. In general, all the training content of indoor handball could be done on the sand. The sand itself is a good teacher and will have an implicit and direct impact on the development of the general handball skills and abilities, because the higher challenges on balance and differentiation, handball training on sand could be seen as training means of coordination. The game forms for the Under-8 and Under-10 levels could easily transferred and trained as "handball on sand".

In general, the recommended ball in this age group is the methodical ball (for example GOALCHA); this ball is easy to catch and throw and does not hurt.

However, first specific topics tactical and technical skills of the discipline beach handball could be focused on:

- Playing 4 (or even 5) against 3. This gives the attacking team the chance to always find a free teammate and guarantees a better chance to score.
- Games should be played in 2 independent sets (plus always a shoot-out). The playing time of the sets should be short (max. 5 minutes per set) and the shoot-out could be adapted to the playing level (for example, pass from the middle of the court / ball could touch the sand before or after catching, etc.)

- Body contact in defending should be avoided, the only aim of defending is attacking and winning the ball. The training of this behaviour should not be done independent of defence training of indoor discipline. Instead, it should be more done as the training of clean defence with the focus of winning the ball (and not stopping the opponent by body contact with a foul).
- Goals could be awarded with one or two points. In beach handball spectacular goals are
 awarded with two points; the definition of "spectacular" could be agreed by the children
 themselves (e.g. lift the ball, throw behind the back or through the legs), but also first
 attempts of specific mini beach handball actions (frog-jump, all attempts of spin-shots, all
 attempts of in-flights), could be integrated into the training. The training of the skills should
 not be done by focussing on the perfection of beach handball skills, it should be seen as
 variability and coordination training as well as the training of general handball skills
 (throwing and catching).
- If the possession of the ball changes, a fast transition from the one to the other game phase is necessary (offense to defence, defence to offense). These transitions could be fostered by the "block-substitution-principle", which is a major tool the in the game form "mini beach handball".

The competition form mini beach handball is described here:

- on the homepage of the EHF: https://beach.eurohandball.com/education-teaching/mini-beach-handball/
- on the explanation video: https://www.youtube.com/watch?v=3nbq8_MliaM
- in the book "Beach Handball for Beginners" (Springer 2022): https://link.springer.com/book/10.1007/978-3-662-64566-6

These rules are just guidelines and can be always adapted and simplified.

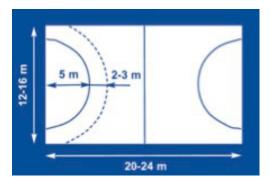
5.5. Small games / playing form

MINI HANDBALL CONCEPT

Almost four decades have passed since the EHF and the IHF jointly officially introduced the concept of mini handball, thus initiating its worldwide spread. Its philosophy is based on developing a simplified game that preserves the "essential character" of handball and brings joy, fun, satisfaction, active participation and a sense of achievement to all players. Mini handball was developed as an educational tool that provides a structure in which the actions and principles of the game can be easily learned and understood ('the game is the teacher'; meaning to learn in and through play). This modified game form was developed with constitutive rules intended to be understandable and playable for every player from the beginning. So, the "official" mini handball rules were design to foster the flow of play and to accommodate children's diversity by removing barriers towards active play and inclusion in play.



Mini handball is a four-a-side game in its most popular form, but there are wide variety of pedagogical architectures (rules and action constraints).



BASIC RULES OF MINI-HANDBALL

Small court: 20-24m x 10-15m Two goals: 160/170cm x 250 (240)cm

Goal area: 5m radius

Soft ball: with a circumference of 44-49 cm, suitable for children, not too heavy, easy to

grip to ensure "fear-free" play.

A teacher/coach should lead the game,

not a referee!

Age-mixed playgroups/intergenerational handball play

The mixed-age play offers opportunities for game skills learning and development not present in play among those close in age. Mixing ages, boys and girls, has advantages for younger children or inexperienced players, who are likely to play handball above their typical level, and for older children or skilful ones, who expand their understanding by teaching others.

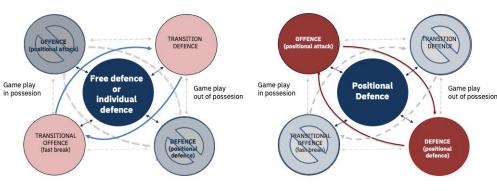
In the first years of handball practice, a coach/educator's task is not to produce the next best handball player – it is to make sure children fall in love with handball in a lasting way so they become active, healthy, competitive and socially just adults. Support and encourage them to make handball a way of life!

MINI HANDBALL: PLAYING FORMS AND STRUCTURES

Distinct and divergent types of modified game forms have different benefits for the development of tactical awareness, game skills acquisition and motor abilities development. Handball initiation can be treated very differently throughout the different sporting cultures or countries. However, the importance of ensuring early and continuing challenges and successes for each child/young player is a crucial aspect of long-term commitment, engagement and involvement in the handball practice.

Two major approaches can be found:

- From positional play to complete handball: with and without offensive advantage and defensive constraints (e.g., stealing the ball is not allowed).
- From fast break play to complete handball: progressing from individual defence system (full court, half-court or in confined areas) to zone defence systems.



Mini handball focused on the fast forward play, with free defence or individual marking.

Mini handball focused on positioned play, with numerical advantage or equal numbers.

Key features among different game play configurations (some examples)

3-a-side or 4-a-side, with offensive numerical advantage

3-a-side or individual individ

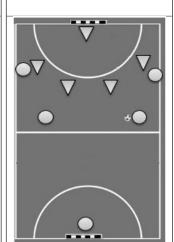
Game cycle focus: positional play

Inclusive and active approach: to develop relational and game skills in more stable and friendly environments 3-a-side or 4-a-side, with individual defence system

V V.

Game cycle focus: forward (open) play

Performance approach: to develop individual skills in open space in more open, unstable, varied environments 3-a-side or 4-a-side, with closed defence



Game cycle focus: positional play

Performance approach: to develop individual skills in positional space in more stable environments



GOALCHA™ Street Handball, with a settled defence

Major game-principles

Attack: attacking the goal through inter-passing (wide play)

Defence: protecting the goal and keeping defensive balance on the ball's side



Realising and solving outnumbered positional play around the goal (e.g., 3vs2, 2vs1 ...)



Wide attacking play with 'soft' pressure:

- » basics of pressure play and inter-passing with 'low'/'soft' pressure
- » squared to goal, takes an open set shot
- » when attacker threatens goal a defender is engaged, releases the ball (assist concept)
- » spread-out positioning (in width), goal oriented, and keeps workable space (not to close to defender)

Individual skills/movements

Open set shot (1, 2 or 3 preparation steps)
Step to catch ball (adjusting body/move)
Execute receivable passes (over-arm and wrist)
towards both sides

Catch the ball (adjusts position/movement), squared to the goal

Body and spacial awareness Peripheral vision GK+4vs4+GK or GK+3vs3+GK with full-court individual marking

Major game-principles Attack: attacking the go

Attack: attacking the goal through inter-passing (wide play)

Defence: protecting the goal and keeping defensive balance on the ball's side

Major problem-solving

Retaining possession and outnumbering the opponents in open space under close marking (e.g., 1vs1, 2vs2, 3vs3 ...)



To make forward play under close/tight pressure:

- » Squared to goal, without an open receiver, seeks to beat defender in wide-open spaces (1vs1) (fake actions with ball and progression dribble)
- » Give-and-go for a returning pass (lead pass concept)
- » Fake actions to evade the opponent (e.g., forward cuts)
- » Spacing positioning (moves away, forwards/ backwards or approaches) to support ball handler and to get open
- » Mobility/replacement cuts
- » Receiving-passing while being close pressured and running into different directions and from varied distances

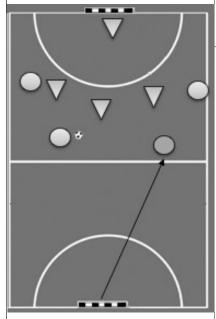
Individual skills/movements

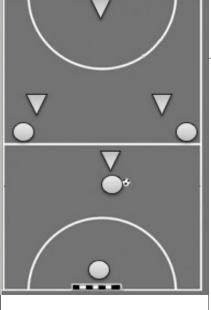
Open jump/running shot with three-steps cycle Execute receivable forward passes (mainly over-arm) and bounced

Body and spacial awareness

Dynamic balance and agility, change of direction and speed

Physical courage and toughness







GK+4vs4+GK or GK+3vs3+GK with zone defence (e.g., 2:2; 0:4)

Major game-principles

Attack: Breaking through a zone defence based on positional duels and attacking continuity (mostly in-wide)

Defence: Denying space and openings

Major problem-solving

Making space and outnumbering the opponents around the goal (e.g., 1vs.1, 2vs2, 3vs3 ...)



To create an opening against a settled defence:

- » Basics of pressure play (gap attack concept) and positional inter-passing
- » Squared to goal, seeks to beat defender (1vs1) to get an opening faking with ball or takes a break-through shot over/between defenders
- » Drawing away the defender (anticipating a successful tackling/closing out action) or crossing (anticipating shadow defence)
- » Spread-out positioning, goal oriented, and keeps workable space (not to close to defender)
- » Positioning according to the flow of the game

Individual skills/movements

Penetration-shot, set shot (with feet on the ground/jumping)

Shooting from the side (back and wing position)
Execute reception-passing towards sides
Side-stepping ability
Body and space awareness

Physical courage and toughness

Where to start? From the simple to more complex, from easier to harder, then: mix it up

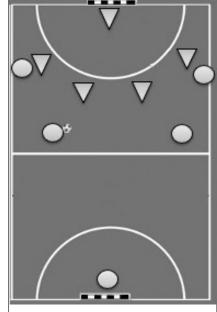
Level 1: Discovering mini handball (≈ 6-8)

Mini handball is based on being an accessible sport for everyone, regardless of age, gender, physical characteristics, motor and game skills, play experience, knowledge and social background.

Because the early success and positive experiences are critical for engagement and commitment, the first game forms and challenges are initially simplified and shaped to ensure that all beginners quickly feel that they can do handball, make friends and have fun! With its emphasis on creating an accessible and inclusive game form, it is essential to remove the playing barriers leading to full emersion in the game play. Therefore, aiming to make the game accessible to all, the physical courage and toughness, technical, tactical and motor demands of the game should be shaped or even eliminated.

Since having ball possession, receiving-passing and scoring a goal defines the objective of the game, the GOALCHATM ball can be used as a powerful tool. The GOALCHATM Street Handball ball was developed to ensure that each player has as much contact with the ball as possible, thereby achieving self-confidence and a feeling of participation and involvement with the ball.

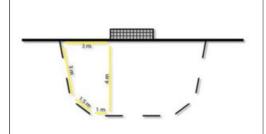
To encourage beginners to pass the ball and to develop technical ability and tactical awareness, attackers must always be given numerical advantage. Usually a single-player advantage is enough.





Game forms with uneven number (4vs.3+1 goalkeeper; 3vs.2+1 goalkeeper)

GOALCHA™ Street Handball on one goal



No lines or regulations for the sizes or the playing field (sketch is an example)

IMPORTANT!

The rules can be adjusted or changes by the players for their own game.

More information under:

www.goalcha.com www.streethandball.org

BASIC RULES

Three- or four-a-side game on one (small) goal

3 versus 2 (plus the goalkeeper) or 4 versus 3 (plus the goalkeeper)

The team can be mixed independent of age limits or gender

Fair play – no referees – each player is responsible for the flow of the game!

No body contact – duels are not allowed! The ball can only be won when it is 'free'; Defenders cannot 'steal' the ball (optional).

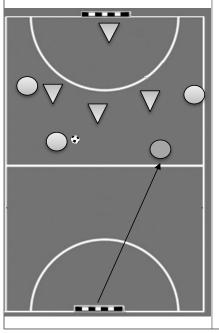
3 steps – no dribbling

After a goal or goal attempt, the teams take turns

» Attacker are now defenders – one defender takes the goalkeeper's position

Before an attack can be launched, the attackers must stand at the starting point and the defenders 4-6 meters from the goalkeeper area.

GOALCHA™ Street Handball Field: 13m by 20m Goal: 240 cm by 160 cm Mixed (with boys and girls)



BASIC RULES

Similar basic rules are applied as the ones presented for Street Handball in one goal

ORGANISATIONAL (scoring and action) RULES Build up attacking and scoring

- » All attackers must cross the midfield line before shooting on goal.
- » All offensive team members must touch the ball before shooting on goal; when a girl finishes it is worth two points (optional).
- » When attacking, the player in the goalkeeping role also participates in the game (empty goal concept), so the attacking team has numerical superiority.

Defensive action rules

» After losing possession of the ball, all team members must touch the goal area before they can start defensive action.

Substitutions/rotation (options)

» The players that shoot become the goalkeeper (when there are no elements on the bench) or is replaced by another (from the bench), who will assume the role of goalkeeper.

Source: https://www.youtube.com/watch?v=qb5BEyEF2SQ

Other optional rules to be considered:

- Eliminating the 3-second rule, a novice might need more time to identify teammates and make decisions.
- In case of steps or dribbling violations, the game is interrupted, and a free throw is conceded to the player at fault, who must return to the starting position and execute the free throw. The game leader should explain to the player in question the reason for the stoppage.
- <u>Dangerous play should be punished</u> with the exclusion of the offending element during two attacks of his/her team, and he/she must be replaced by another teammate. The game leader should explain the reason for the exclusion.

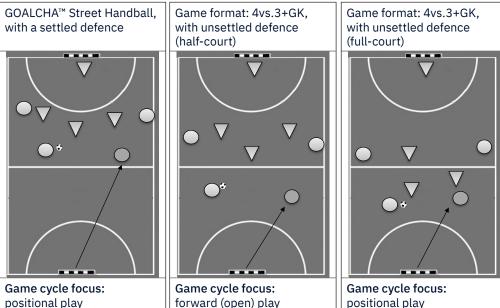


Shaping and constraining defenders' behaviour

Being able to realise and successfully solve numerical advantage situations in open space (with staggered defenders) and around the goal (facing a set and closed defence) is essential. These are the prerequisites to move to a more complex game form.

The simple change of certain defensive behaviours (as shown in the figures below) will allow the creation of situational problems to come into play more often, giving players more opportunities to realise and solve them. For example, with an unsettled defence (defenders are free to step up and pressure attackers), more game play uncertainty and action variability (in both attack and defence) are expected to occur.

- From a defence perspective, the unsettled defence induces more space to move in and body awareness, triggers active ball stealing, anticipatory and multi-directional movement skills of running (backwards and sideways as well as forwards, accelerations, stoppings, etc.). In contrast, the settled defence will increase the practice of defensive positioning.
- From an attack perspective, the settled defence produces more stable game play situations, fosters spread-out attack, positioning without the ball and inter-connecting passes around the goal. In contrast, against an unsettled defence, more open forward play, moves without the ball, and passing and reception variability are expected.



When the goalkeeper restarts play, the opposing team must run to its goal area line and is prohibited from defending until the opposing team crosses the midfield line; this rule aims to give the goalkeeper time to pass the ball and to securely step out from the goal area and play as a court player.

Even game play with defensive pressure

While the numerical advantage ensures early success, in some groups, the individual defensive responsibility (without physical contact) might be introduced to increase the challenge to those who are already able to solve numerical advantage in a wide variety of playing scenarios.

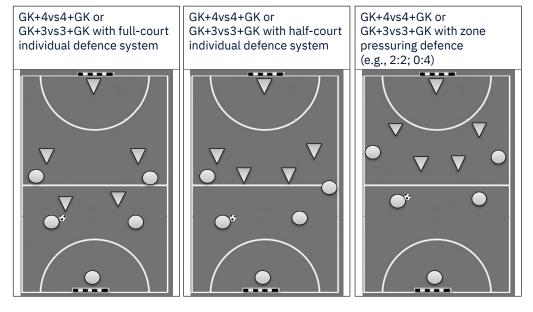
While the full-court pressure ensures more open space to exploit with and without the ball, it usually leads to a less game flow and more individual actions based on solving physical duels and dribbling (before anything else). Inevitably, this game configuration leads to more play interruptions, passing mistakes, and lost balls; and is also prone to physical contact which might be problematic when having boys and girls. It also provides less space-time to make decisions/action, and skilful, stronger or "bigger" players tend to dominate the game and play alone.

These kind of game forms, increase practice of:

- off-the-ball actions (getting free)
- ball reception and pass under pressure or with interference
- easy open shots

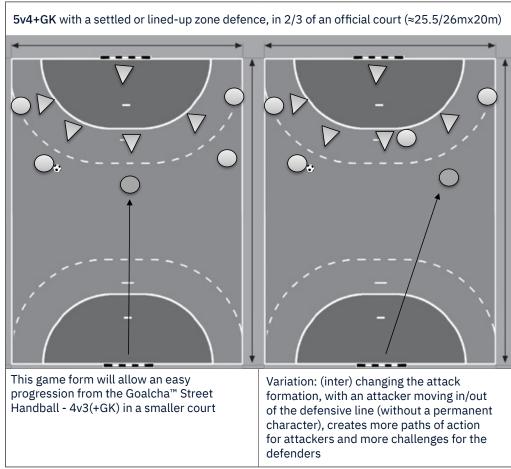


In general, the full-court marking stimulates high locomotor activity, multi-directional movement skills and running rhythm variability. Less pressuring defences (half-court or around the goals) foster more prolonged inter-passing actions and more initiative with the ball.



Level 2: Mini handball development (≈ 8-9)

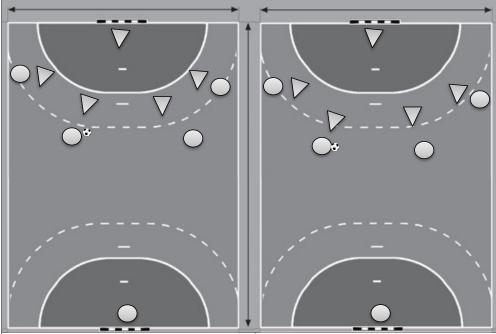
Once more, the game forms or modifications should reflect players' development readiness and should cause certain action constraints of the game to come into play more often to give beginners more in game skills practice and repetition of key tactics or elementary tactics. At this level, it might be necessary to increase the size of the court and the number of players or introduce equal numbers between court players. Here are two possible progressions, as illustrated in the figures below (with offensive advantage or with equal numbers, but with increased – exaggerated – space better defenders.)





GK+4vs4+GK with a lined-up zone defence, in 2/3 of an official court (≈25.5/26mx20m

GK+4vs4+GK with a lined-up pressuring defence, in 2/3 of an official court (≈25.5/26mx20m)



This game form will allow more positional duels (1v1, with ball), and development of the individual (offensive and defensive) skills

This game form will allow an easy progression from full-court marking to individual zonal pressure around the goal

Minor games and small-sided games (practice considerations for children's' handball)
Minor games or lead-up games are structured to have many similarities with real handball.
Games like "end-zone game", "line handball", or "mat ball" can be used to introduce
players to the initial concepts of attacking and defending a goal/space, as well as teamwork
fundamentals and supporting the ball player, making forward progression, among others.
Games that satisfy the need for a variety of fundamental movement experiences at young ages
(e.g., throwing, catching, running, jumping, changing of direction) and simultaneously pose
different tactical and strategic problems should also be used, such as evading or defending
their territory.

Relays in various forms, with and without a ball, are very popular with children, easy to organise, and can help to accommodate a large group of players. Still, its use should not be overused. While it could be claimed that this kind of activity can be used to teach basic motor skills and ball skills (such as dribbling), the fact is that children would get far more practice if they each had a ball instead of having five or more children sharing one ball and waiting for their turn. Besides, it might be very frustrating and embracing for the low-skilled players.

While throwing and catching are basic skills to learn and master, they can be developed fairly easily with simple partner drills. But beginners should not spend too much time working on these techniques in isolation and without variability; it is advisable to intersperse them with partner competition (such as chasings) and quickly change to passing practices.

Small-sided games, also referred as conditioned games, are less complex games than the game forms presented here, allowing to focus on specific tactical and technical skills through a range of enjoyable play-like activities.

In addition, there is a wide variety of small-sided games and action constraints/goals that can be used to develop tactical awareness, game principles and specific game skills needed to improve game performance.

For example, with beginners, the key to rapid improvement in passing and catching is using simple passing games with reduced number of players (2vs1, 3vs1, 3vs1, 4vs2, 4vs3, 2vs2, 3vs3, and 4vs4), go-for-goal games, half-court/sectorial games.



5.6. Competition form

The competitiveness by itself is an essential skill in playing handball; the focus should be placed on creating safe competitive settings and providing a positive experience for all. While some children are eager to compete and keep scores, others are unwilling and dislike competition, causing them stress and anxiety.

Aside from being a pedagogic tool for expanding a child's playing comfort zone, testing their learned game skills, it helps them to cope with success and failure, to regulate emotions and frustrations – and thereby developing important skills like resilience and perseverance – they also learn how to take turns, to encourage and develop understanding about others. In other words, there is nothing wrong with wishing to win, but healthy competition should empower children to work hard, strive together, and to lose constructively (what is needed to improve or learn next or to train more).

Before (and during) the game play, team leaders should agree on what game form(s) fits the best to balance the team's confrontation, fostering play flow and game quality, according to the participants' level of skills, thereby providing a good experience for all. It should be remembered that there is a wide variety of possibilities.

Competition settings should be conducted according to the following principles:

- Leadership and control during a game should be assured by an educator not a referee!
- All beginners should have the opportunity to play, compete and gain experience of winning and losing without focusing on tables and results.
- Use fewer players in each game to give each player more playing time.
- Ensure that each player plays the same amount of time.
- All players should play in attack and defence and try all positions.
- Counting the shot scores, it is advisable to employ a set concept to avoid quite unbalanced results. For example: the match is played best of three sets (with a time limit).

UNDER 6-8S

Teams put into regional competition groups, based on their location.

Occasional competition days as "handball festivals" during school year.

• Team: 4 court players +1 goalkeeper

Playing court size: 20X10 m

• Goal size: 160x250-270cm

· Goal area: 5 m radius, 6m throw line

• Ball size: 13-14 cm diameter soft material (sponge, foam, rubber)

• Playing time: 2x10 minutes (time is only stopped when injury)

· Team timeouts: not allowed

• Suspension time: 1 minute / or one attack

Competition rules:

- apart from playing handball matches, the children take part in the program "start off throw" where they play small games (running really, chasing, throwing and catching, etc.)
- a team consists of a minimum of 4, maximum of 8 -10 players
- every player registered for the match must play at least 5 minutes (use automatic signal)
- score is not counted
- every team has to delegate 1-2 young referees (aged 14-20), or parents, or older players

Restrictions: not permitted to

- use glue
- mark somebody (no one-to-one defence)
- substitute players for attack or defence only (no fixed positions)
- a player can play maximum 2 age category teams (own age group and one above) for the same club



UNDER 9-10

- Teams put into regional competition groups, based on their location.
- Occasional competition days and handball festivals during school year.
- Team: 5 court players +1 goalkeeper
- Playing court size: 20x15 m
- Goal size: 160 (170)x250 (240) cm
- Goal area: 5 m radius, 6m throw line
- Ball size: 13-14 cm diameter soft material (sponge, foam, rubber)
- Playing time: 2x10 minutes (time is only stopped when injury)
- · Team timeouts: not allowed
- Suspension time: 1 minute or one attack

Competition rules:

- apart from playing handball matches, the children take part in the program "start off throw" where they play small games (running really, chasing, throwing and catching, etc.)
- a team consist of a minimum of 6 and a maximum 12 players
- every player registered for the match must play at least 7,5 minutes (use automatic signal)
- · score is not counted
- every team has to delegate 1-2 young referees (aged 14-20)

Restrictions: not permitted to:

- use glue
- mark somebody (no one-to-one defence)
- substitute players for attack or defence only (no fixed positions)
- a player can play maximum 2 age category teams (own age group and one above) for the same club

5.7. Workshop leader / coaches' profile

Education level: Handball Instructor

The content of the demands:

- the child's physical, psychological and social development, which significantly affect the child's training -> this is the golden age of learning
- training of different characteristics
- · basic motor and coordination skills
- games and plays -> handball oriented and in a small group
- basic handball skills: passing, throwing, feinting, defensive movement, playing as goalkeeper
- · managing and directing the group
- understand the basic handball rules -> introduce them to the children
- Goalcha games should have an important role in the trainings = fun and simple

Hints:

- feedback with question ("why did you pass the ball to John?" children need to start to think (before) making decisions
- language (keep it simple!)
- don't interrupt the exercises/games
- organise the training session in a way that you can see all the players (if you are alone, without assistant coach)
- · relentless in indiscipline



6. BASIC HANDBALL (AGES 10 - 13 YEARS)

6.1. Physical aspects

STATUS

The third stage of long-term performance development and first stage of systematic sport-specific performance development. The main goal here is in laying a solid foundation for purposeful versatility.

Best motor learning age, highest coordinative skills! Children have perfect load-power ratios and nearly perfect conditions to learn special movements in rough and fine form. But not inferior variety. They learn special techniques.

FOCUS

Development of coordination, speed and strength. Develop sport-specific movement patterns and core movements with the highest possible quality. Nevertheless, enable comprehensive movement experiences imparting basic tactical knowledge. Introduction to psychological-emotional abilities (determination, willpower, ability to concentrate, etc.) through experiences and adventures in sport.

Content: Exercise, training and game forms of handball but try also other sports. General coordination training. Playful strength training - playful speed training (neuromuscular) - playful forms of endurance training. Competition performance should not be considered yet! Injury prevention programmes should be started!

Strength

Learn focused: Climbing, running, jumping, pulling, throwing, pushing, slinging, wrangling, tussling, obstacle course, partner strengthening exercises, sensorimotor skills with high coordinative approach = intermuscular coordination. Learn simple core strength exercises (myofascial training – muscle chains). Beginning of technique acquisition training – free weight and medicine ball technique-strength training.

Endurance

Endurance forms in the aerobic and anaerobic area. Endurance performance in the anaerobic area is usually developed in every sports game anyway. It should therefore be tried to intersperse aerobic forms of play. No endurance training in the classic form!

Submaximal heart rate, as well as HRmax are higher in children than in adults. The fast cardiorespiratory adaptions and the great activity of oxidative enzymes justify using maximal und submaximal aerobic power loads and in the form of short repetitions.

Children can work in higher intensity than adults without significantly requiring a lactic metabolism.

Speed

Various forms of play in connection with all coordinative abilities: reaction, balance, differentiation, orientation, rhythm, coupling ability, etc. Coordination under time pressure (focus on technical development).

Coordination

Various forms of play and skill competitions but with regard to all coordinative abilities: reaction, balance, differentiation, orientation, rhythm, coupling ability. Versatile challenges and support!!

Mobility

Start with basic mobility work if it is necessary. Joint and muscle flexibility are developed through dynamic forms. Full range of motion especially in free weight technique training.

6.2. Mental / social aspects

(boys approximately from 9 to adolescence (11), girls approximately from 8 to adolescence (12))

- Brain and body primed for skill acquisition.
- Build fundamental skills in a wide range of sports and activities. A child starts to learn more about technical and tactical skills development through fun activities and games as opposed to regimented training.
- Ensure environment promotes and supports fun and friendship.
- Avoid early over-specialisation.
- Consider individuals' variations in physical, psychological, cognitive, emotional and moral development.
- Informal talent identification with opportunity to move participants to an enriched training environment.
- Focus on introduction to formal local competition, with emphasis on fair play, and opportunities to try different events or positions.

6.3. Handball skills (technique / tactics)

By continuing the structured training started in previous years, children of 10-11 years of age acquire further knowledge of the technical-tactical foundations of handball. The more confident and economical technical execution make it possible to consciously apply certain group actions thus to increase the level of tactical knowledge and the effectiveness of teamwork.



During the ages of 12-13 a variety of the attack against unsettled or organised defence as well as the effectiveness of group defence significantly increase by broadening the fundamental skills of handball. The playful practice gradually transforms into a more intensive training, the development of sporting abilities increases and the direction of training slowly progresses towards the selection of players into different positions.

Recommended training sessions: 3 - 4 per week

Aim: To lay down the fundamental skills of handball by:

- · mastering the throwing motion
- improving ball handling skills
- · encouraging group work
- reinforcing a healthy competitive spirit
- · further enhancing the sense of positioning
- nurturing the sense to readily adapt to game situations
- increasing the amount of collective work
- extending and consolidating cooperation between players
- developing the ability to combine technical elements
- encouraging to consciously utilise natural body strength
- developing a sense of problem solving in different game situations

TECHNICAL TRAINING

Extensive movements and more playing experience require the extension of the attacker's and defender's basic positions, so it is necessary to introduce the piston movement and side-stepping as well as falling out and shuffle steps.

The accelerated speed of running encourages the necessity to learn changing direction in an angular path giving the young player a basis for learning new technical elements.

During various exercises, the techniques of catching the ball in basic position should be further developed. However, due to the acceleration of playing the game the techniques of catching the ball at different heights while moving should be learned. In particular, catching balls coming face on, from either side and diagonally from the back should be practised while running. Besides constantly refining the catching techniques, towards the end of this age period the young player should acquire the process of catching the ball with one hand and while jumping and utilise the ensuing advantages in game situations.

Passing exercises should be further extended so that players while practising in pairs and in other formations increase the distances and speed of the technical execution. Besides refining the technique of the overarm pass, other one-handed techniques like the underarm and jump passes should also be introduced with the preparation of the ball into the throwing position in a circular path.

After acquiring confidence in dribbling, the faster method of dribbling while moving should be introduced with the practice of low dribbling. Dribbling skills should be mastered later on so that the player can confidently execute high or low dribbling with alternate hands while changing direction or when close to the defender.

As young players are able to change direction quickly, it is a good time to lay down the foundations for faking techniques by introducing the fake shots and fake passes. Once the players have acquired good foundations, the repertoire of faking techniques can be extended to include simple and combined starting fakes.

The increasing amount of collective work and the better organisation of the attack necessitate the acquisition of the different offensive blocking techniques.

As an extension of goal shooting techniques, underarm and long jump shots should be learnt. Besides confidently using the cross step to build up momentum, the dragging step can also be practised. Later, as a new goal shooting technique, it is practical to introduce the most complex yet effective curved and jump shots. Especially when practising to build up momentum for the curved shot, the diagonal step should be introduced to facilitate the technical execution of the shot. Now is the opportune time to differentiate the jump and the 9m jump shots, highlighting the differences between the direction of the jump and the function of the shots. This is also the time to lay down the foundations for falling techniques using various exercises adapted from gymnastics.

With the increasing number of learnt attack techniques, it becomes necessary to broaden the effectiveness of the defence by acquiring the basic techniques of tackling and individual blocking both on the ground and in the air. Later on, more effective defence work requires the extension of individual blocking and practising the techniques of collective blocking such as side-by-side and supplementary blocking.

By introducing the fundamental techniques of stealing the ball, an attempt is made to encourage a more offensive defence. Intercepting a pass or knocking the ball away while dribbling should be mastered to such a level that the ball can be stolen with the appropriate technique according to the game situation.



TACTICAL TRAINING

In attack against an unsettled defence, extended fast breaks should be practised in such a way that players consciously approach the opponents' goal by maintaining moving direction, by changing positions or with combined movements. Against an organised defence, players should master mobile attack and try to create scoring chances by consciously changing positions. Later, disciplined static attack should be introduced against organised zone defence, trying to build up the attack with moderate open play.

During the attack organisation, the practice of group tactical elements should be highlighted, particularly the concept and function of parallel thrust. Furthermore, crossing and passing to the line player should also be mastered to facilitate the attack organisation and to set up a scoring position for a teammate. With the increased repertoire of faking techniques, it becomes easier to reach a scoring position, so breaking-through with the ball should be practised in 1vs1 and 2vs2 situations.

In order to complete the attack, young players should be encouraged to score with throughshots from the ground and then from the air to utilise the given advantages of penalty throws. In defence, players should try delaying the attack in the quick retreat phase when the opponents attempt a fast break. The group formation of quick retreat is the most effective against extended fast break, thus moving back quickly in a semi-organised manner should be consciously practised later on.

Players should master close marking as another basic element of individual defence and use it effectively when there is half court pressing. Then, the knowledge of close and distant marking should reach the level where they can be used alternately when there is full court pressing. Technically and tactically well executed close marking makes it possible to lay down the basis for individual defence system and provides the foundations for the future employment of mixed defence.

The coordination of the players' movement in depth and in width within the defence wall should be practised so that the formation of 5:1 zone defence is used effectively. Furthermore, with the introduction of the 4:2 zone defence formation, the defence activity becomes more aggressive and ball-oriented, offering more opportunity to steal the ball. Also, in the zone defence formation, the process of falling out-securing-re-joining should be introduced to highlight the necessity of coordinated group work within the defence wall. The increased movement frequency of the attackers forces the defenders to rely more on the support of team-mates therefore, the process of taking over-guarding-handing on should also be mastered.

In this age group, the practice of different sporting abilities can be divided to a certain degree, yet during training these will impact on young players in a number of ways. In spite of this, when developing sporting abilities, first skill then endurance have priority, closely followed by agility and strength.

6.4. Beach handball skills (technique/tactics) and beach handball training at basic handball

At this age, the level should be clearly differentiated between "handball on sand" and beach handball. As in the age levels before all technical/tactical indoor components could be trained and played on sand, but at this level the typical body contact which occurs in indoor handball could complicate the game flow and the game enjoyment by playing handball on sand.

In general, the recommended ball in this age group is the smallest beach handball (for example TRIAL 00); this ball is pliable, easy to catch and throw and does not hurt.

Following the major topics to learn at the age level and the competition form "Mini Beach Handball" at this age level the game form "Ultimate Beach Handball" is suggested:

- The children should now learn that beach handball is played 4 against 4 (including goalkeeper/specialist). In mini beach handball, it is not problematical to play just 3 against 3 or 5 against 5 if this seems reasonable in the sense of a smooth and joyful game flow. However, in ultimate beach handball, the number of players should be 4 against 4. The goalkeeper has a special role; he is not bound to his goal area but goes in attack plus his or her goals count two points.
- At a tactical level, first space distributions could be done; the children learn that in beach handball there are specific positions (in defence and offence). However, all children should have the chance to gain experience on all positions. Like in indoor handball, a position specific specialisation should be avoided.
- In beach handball there are not only game positions, but also game functions; the player who wears a jersey with a different colour, acts as a goalkeeper. Only he is allowed to enter the goal area. If the goalkeeper enters the field and plays in attack, he acts as a specialist, his goals are awarded with two points. In the competition form "Ultimate Beach Handball", it is suggested that the goalkeeper acts as specialist and vice versa, and no specialisation/ substitution between these two game functions should be allowed.
- The regulations concerning the trick shots are in this age group already close to the beach handball rules for adults. Successful spin-shots attempts (360 spin is not necessary, but a jump with both legs), successful in-flight attempts (a hit of the ball is also allowed), 6m-penalty-goals as well as goalkeeper goals are awarded with two points.



The competition form **Ultimate Beach Handball** is described here:

• on the homepage of the EHF:

https://beach.eurohandball.com/education-teaching/mini-beach-handball/

• on the explanation video:

https://www.youtube.com/watch?v=3nbq8_MliaM

• in the book "Beach Handball for Beginners" (Springer 2022): https://link.springer.com/book/10.1007/978-3-662-64566-6

These rules are just guidelines and can be always adapted and simplified.

At this age level the children get now into contact with the typical competition/tournament character of beach handball. Competitions should be organised in one-day-events with a maximum of 4 up to 5 matches per day. In this way the children can learn on psychological and social level - how they handle failure and success in a short time periods as a team, and how they get familiar with the competition structure.

6.5. Small games / playing form

TRANSITION TO HANDBALL

Because the progression presented here is built on previous game understanding and performance skills, at this stage, the number of players should be increased, as well as the introduction of new basic structures in offense and defence. Thus, this is the transition phase towards a more demanding game form while gradually getting into the full game.

This is perhaps one of the most important critical development stages, as it is expected to have teams or groups with different levels of game skills and motor performance abilities. More game experienced, highly skilled or early maturing players might be ready to advance to a more complex and demanding game form while others might go more slowly and needing to spend more time on the simple game forms as the kind presented previously.

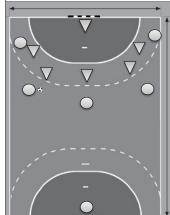
Even if the girls go through their adolescent growth about two years earlier than boys, the practice shows that, typically, neither of them yet possesses readiness to successfully cope with the full game requirements. For example, they reveal a lack of strength and technical ability to execute shot attempts from long distance or from the wing (with narrow angles), that typically occur against a closed organized defence.

Some countries use full-court pressure to deal with this circumstance. Also, involving beginners in a game format that is beyond their motor developmental and game skills ability can lead to frustration and early dropout.

The game form based on the 6-a-side in 2/3 (20 by 25/26m) of an official court without having a fixed line player is a logical progression. Also, here, a wide variety of defensive formations can be adopted. For some, the full-court pressure should continue to be used as a key defence. But the advice here is to preferentially use a zone defence: 5-0 (less pressure), 0-5 (more pressure) or 4-1. As these different forms of defence lead to different action constraints and options, in both offence and defence, they can be used in a progressive or parallel development. While 5-0 has benefits to develop break-through shots, one-on-one with ball, and attack continuity, a more pressuring defence leads to more play without the ball (inside cuts/running) and diverse joint actions and scoring options.

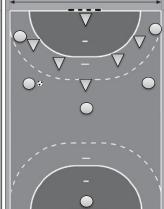
While in some countries, the transition into the complete game may occur at about 9, 10 or 11 years of age for both genders, the approach presented here is based on the assumption that this should not happen before most players get into puberty.

(GK+5)vs(5+GK) with a settled or lined-up zone defence, in 2/3 of an official court (≈25.5/26mx20m)



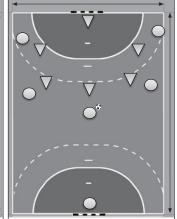
Adopting a tactical structure that leads to more wide attacking, 1-on-1 with ball and pressure play (gap attacking with pass continuity).

(GK+5)vs(5+GK) with 4:1 zone defence, in 2/3 of an official court (≈25.5/26mx20m)



Adopting a tactical structure that leads to more actions to exploit the open space inside the defence, through running/cutting moves, to get into the line player position.

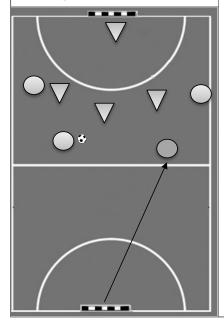
(GK+5)vs(5+GK) with 2:3 zone defence, in 2/3 of an official court (≈25.5/26mx20m)



Adopting a tactical structure that leads to exploiting the space behind the defence line, through inside cuts (frontal/behind the defender).



6-a-side in 2/3 of an official court, with empty goal to create offensive advantage: 6vs5(+GK)



At this stage, it might also be possible to start playing on an official court, using a balanced number of players per team or an offensive numerical advantage (with an empty goal). But, again, the decision should depend on players'/team's level of development and local sports facilities.

GOALCHA Street Handball

Team size: 3vs3 or 4vs4,

Playing court size: 1 Mini Handball goal Ball size: Goalcha Street Handball

Competition rules:

- 3 steps, no dribbling
- no referees
- after goal / goal attempt teams will change
- can be played indoor and outdoor

Restrictions: not permitted to:

• no body contact

(for details see https://goalcha.com/goalcha%ef%b8%8f-street-handball/)

6.6. Competition form

INTRODUCTION

At this stage, it is expected to have an increased number of regular matches per month. When having several teams in a region/district, 'little local leagues/divisions' should be organised with recurrent promotion and downgrade of the best-ranked team(s) or the worst-ranked team(s) during a season. This procedure allows giving several game experiences and challenges to beginners.

As, in general, girls experience puberty earlier than boys and so may become temporarily taller, stronger and heavier than male players of the same chronologic age, yet there is nothing wrong with mixed teams playing. Generally, both girls and boys prefer to play in same sex teams. But allowing girls to compete with boys (and vice versa), especially if there is not an equivalent same sex team available, is of utmost importance.

Competition settings should be conducted according to the following principles:

- The same principles earlier can be applied to this age-group category.
- One or two official referees might lead the competitions, but a coach or older players can also assume this task.
- Except for the goalkeeper, only attacking or defending players should not be allowed.
- When deliberating about the match time, a minimum of two periods of 18 minutes each should be used with a 5-minute break. Other options: 4 periods of 12 minutes, with a 1-minute break between the 1st and 2nd periods, the 3rd and 4th periods and 5-minute break at half-time.
- Regular double games per week and for more than one age-category team should be avoided. A balanced ratio between practice and competition should be in place.
- A player should only play for two age-category teams (own age group and above). Wishing to play more than two (2) years above their age should be assessed and approved by the association/federation responsible for the competition.
- Special rules can also be in place to permit that less experienced players (such as, being in the first year of regular handball practice) are able to play two (2) years below their age category.
- At this age-group, there is a strong tendency towards organised competitions specifically
 for girls or boys, though girls should be allowed to play on a boys' team (and vice versa).
- When deliberating about ball sizes, preferably smaller ones should be chosen to help good technical learning and controlled and fast multi-joint throwing movements.
- IHF ball size 0 is recommended for both girls and boys, at least at the age of 12. By the age of 13, boys should start using IHF Ball size 1.



Competition form

Teams put into regional competition groups, based on the location. In Under 10-11 age group the teams stay in the same groups for the whole year, At Under 12-13 based on their autumn performance hey rearranged for the spring competition.

Every team has one competition day per month during school year (3 match day in autumn, 3 in spring) where every team plays two matches per day.

Throughout the championship year every team plays with each other twice.

• Playing court size: 40x20

• Goal size: 200x300 cm

• Ball size: 13-14 cm diameter (synthetic or leather)

• Playing time: 2x20 minutes (time is only stopped when injury)

• Team timeouts: once 1 minute / half / team

• Suspension time: 1 minute

Competition rules:

• a team consist of maximum 14 players

• every player registered for the match must play at least 10 minutes (use automatic signal)

 score is not counted at all in Under 10-11, yet score is counted, but only the final result in Under 12-13

Restrictions: not permitted to

• use glue

• mark somebody (no one-to-one defence)

• substitute players for attack or defence only (no fixed positions)

 a player can play maximum 2 age category teams (own age group and one above) for the same club

6.7. Workshop leader / coaches' profile

Education level: Handball Coach level 1
The content of the demands:

- coaching theory: progressiveness of coaching, basic motor and coordination skills, age specific training, basics of physical training
- coaching skills: me as a coach, development, learning, leading a team, understanding of coaching activities
- basic handball skills: personal attack and defence technique, basics of goalkeeping
- ability to plan and implement stimulating exercises, where the players active handball time is at least 80% of the training time
- ability to plan and implement an exercise package that promotes physical activity and sportsmanship
- a deeper mastery of the rules
- · activate children and families for voluntary exercise and movement
- becomes aware of and recognises his/her own strengths and opportunities for development as a coach



7. YOUTH HANDBALL (AGES 14 - 16 YEARS)

7.1. Physical aspects

STATUS

The fourth stage of long-term performance development and second stage of systematic, handball-specific performance development, continuous increase in the scope and intensity of the training.

Erratic change in "being human". Extreme growth, extreme weight gain, mental instability, extreme shifts in proportion. Deterioration of the load-power ratios. Coordinative problems therefore preserve techniques as much as possible, but: good conditional resilience.

Dropout rate is very high cause everything changes – very confusing for the teens. Sport can be used as a stabilizing factor as a safety net!

FOCUS

Further development of coordination, strength, speed and endurance. Development of high-quality special techniques (quality over quantity). Development of tactical knowledge.

ATTENTION: fun must still be in the focus. It's important not to suffer burnout – drop outs are a problem!

- General: special general coordination training. Introduction to special strength training (special body weight training, learning strength training with additional weights on a coordinative basis)
- Special speed training (neuromuscular). Playful endurance training and introduction to general endurance training (non-sport specific)
- Development of the sport-specific basics specific technical training development of tactical knowledge

Strength

- Difference depending on development phase pre / during / post puberty.
- Learning the basic body strength exercises muscle chains training.
- Technique acquisition of strength exercises with (low) additional weight, exercises with free weight.
- Technique acquisition of special jumping and running forms.
- The focus should be on learning and further quality development of the technique and not on the intensity of the exercises. Speed focused free weight exercises.
- Outcome: Further development of physical stress tolerance.

Endurance

Special playful endurance training. Learning about classic endurance training across a wide variety of sports. Total loads in the aerobic conditioning range, but over interval-oriented training or game forms are particularly suitable.

Speed

Special speed game forms that correspond to the structural characteristics of handball. Learning of special jumping and running forms to develop speed (attention core strength). Attention recovery times!

Coordination

Special general coordination training: All coordinative skills should be learned but encouraged with a special focus on handball! Attention: The breadth of the coordinative training should still be maintained! Versatile challenges and support!

Mobility

All forms of mobility training as required. Full range of motion (strength) training, stretching, influencing connective tissues – myofascial release - black roll, trigger point, etc.

7.2. Mental / social aspects

(boys 12-16 years old, girls 11-15 years old)

A critical stage in the development of high-performance athletes. In this stage they either:

- commit to high performance and begin their journey train to compete, train to win

 » this is the stage for tremendous skill refinement, and for greater position/event specialisation
- choose to compete at a lower level or to train at a recreational level;
- drop out of sport
- » Cultivate life skills. Ensure environment promotes and supports fun and friendship.
- » Greater attention to mental preparation.
- » Develop ethical approach to sport including respect for opponents and fair play and commitment to doping-free sport.
- » Competition has been designed to support what has been practiced in training.
- » In early stages, focuses on the process of competing and using recently learned skills in competitive situations not on results.



During adolescence, the transition from childhood to adulthood is most important. Socially, this is a time when teens define who they are as individuals. It is the time when they are trying to figure out "who they are" and "how to accomplish it.".

For the athlete, this is a time when they transition from foundational development to specialised training. At this time athletes have committed to specialising in one or sometimes two sports.

7.3 Handball skills (technique / tactic)

Based on previous observation and testing, it is practical to select players around the ages of 14-15 into specific attack and defence positions according to their abilities. With this the direction of training changes so that during technical, tactical and condition training, besides maintaining the level of general knowledge, specialised practice takes priority.

Taking into consideration that boys and in particular girls go through a phase of growth during this time period, initially, enough time needs to be given to the players to adjust their technique to their new body structure (change of proportion of trunk and limbs). Then, around the age of 16-17, with the specialisation of players in different attack and defence positions, it becomes necessary to acquire the specific technical and tactical requirements for each position.

Recommended training sessions: 4 - 5 per week

Aim: To broaden the fundamental skills of handball by:

- increasing the amount of team activity
- improving the sense of positioning
- refining the ability to appropriately apply faking techniques
- encouraging the continuity of teamwork
- highlighting the importance of individual responsibility
- encouraging players to use natural body strength
- improving the collective work of neighbouring players
- training players to adapt to changed game situations
- highlighting the importance of sacrificing personal ambition for the team's success

TECHNICAL TRAINING

Despite the increased playing experience and familiarity with certain skills, it is still necessary to constantly practise the attacker's and defender's basic movements as well as quick direction changing with and without the ball while running. Particularly for a more effective attack activity, the piston movement should be mastered so that while moving forwards and backwards the processes of catching and passing are executed economically and naturally.

By this stage the players' ball handling skills should be so confident that catching, holding, passing and dribbling are executed effectively close to the defender even if he interferes.

For the safety of the player, it becomes necessary to introduce the basics of falling techniques so that players should consciously avoid injury by landing on the arms and by rolling over.

With the specialisation of players into the different attack and defence positions, the method of learning new technical elements changes from the general to the specific.

Thus, players selected for the centre back and back court positions should acquire the back-hand pass and in order to shorten the preparation of through-shots from the ground, practise the hop step. The faster and more fluid attack organisation requires learning the wrist pass to reach such a level that it can be implemented into both directions without hesitation. Furthermore, to facilitate getting into a scoring position, they should master the arm swinging fake and the process of guiding into blocking.

Similarly, the wingers should extend the long jump shot to the more effective sliced shot and curved dive shot to increase their scoring percentage while to make it easier to get into a scoring position, they should master the technical execution of the rotation fake.

For more effective attack activity, the line player should master the falling shot and execute the dive shot to both sides. While to improve his/her preparatory work he/she should be able to apply the process of shadow blocking and perform a screen in order to set up a good position for a teammate or for himself/herself.

In defence, the aim of the players should be to consolidate the previously learnt technical elements and further refine them. However, this is the time for the goalkeeper who already has shown interest and aptitude in this position, to lay down the basic techniques of saving.

Therefore, the correct basic position and practical basic movement should be mastered first and then according to the psychological and physical abilities of the goalkeeper, a modern, offensive saving style should start to be developed. During specialised goalkeeper training, saving long range shots coming at different levels should be practised with a sequence of through-shots in order to acquire the correct techniques of one-handed and two-handed savings as well as saving by lunging sideways and by sliding-out. When learning the technique of saving side shots, the main aim is to create a confident and fearless saving style. Therefore, saving at the near post should be acquired first and then the technique of saving by jumping out



should be introduced. It is also necessary even at this stage, to practice setting up fast breaks by making a long pass and bringing the ball quickly back into play during goalkeeper training.

TACTICAL TRAINING

In attack against an unsettled defence, it is important to practice the team formation of offensive transition. So, completed fast breaks should be mastered in such a way that the players consciously approach the opponents' goal in different waves. As another form of offensive transition, players can be taught the importance of executing a quick throw-off and use it consciously.

Players should try to create a scoring position against an organised defence with disciplined teamwork and by relying more on the preparatory activities of their teammates.

Within the framework of the static or combined attack systems, set play should be practised in order to build up the attack.

For a more effective attack organisation waving should be introduced as a continuation of parallel thrust and the technical-tactical process of blocking/freeing should be mastered.

During attack organisation, changing the basic formation of the team should occasionally be practised with the winger or the centre back running in to the second line player position temporarily.

The repertoire of completing the attack should be extended with the introduction of breaking-through without the ball and with the mastering of a few effective set moves to better utilise free-throws close to the goal area. With these group manoeuvres, individual skills and collective work can be trained at the same time.

In defence, besides constantly refining the forms of one-to-one defence, it is advisable to introduce 5+1 and 1+5 combined defence as well as practising of 3:3 zone defence. Since these defence systems are better divided in depth, communication between the players in different defence lines needs to be further developed.

When practising quick retreat against a complete fast break, players should be encouraged to initiate a pre-retreat, then defend in a team formation by settling down temporarily close to the goal area.

Against an organised attack, the group tactical elements of evading and switching should be mastered in order to improve the effectiveness against the process of offensive blocking.

With the specialisation of players in different attack and defence positions, specific skill training should be introduced into the training routine as it is necessary to acquire the specific tactical requirements for each position.

Thus, the winger should execute well the passing and faking techniques on both sides of the outside defender as these are necessary in this special position. He/she should actively take part in collective play by running in behind and in front of the defence wall to try to set up a position for a teammate or for himself/herself.

The **line player** should develop a basic movement specialised for his/her position which is hard to follow for the opponents yet predictable for his/her teammates. He/she should know all the forms of offensive blocking and execute them according to the team's tactical duties in order to set up a good position for a teammate or for himself/herself.

The **back-court player** should know the movement area of his/her position and the duties deriving from it. That is, to actively take part in the attack against organised and unsettled defence and to utilise the working relationships with his/her neighbouring teammates so that he/she becomes a vital factor of the attack.

The centre back because of his/her position should take on the role of organising and directing the team in attack. He/she should nurture communication between the coach and the team and develop preparatory activities which help the work of each teammate.

The **goalkeeper** should lay down solid foundations for saving to form a confident saving style according to his/her physical and psychological abilities. He/she should try to direct his/her teammates' defence activity and attempt to initiate fast break whenever there is a realistic chance.

The **outside defender** should develop an effective basic movement from which he/she is able to effectively neutralise the winger. He/she should defend well in 1 vs 1 situations and must be able to keep his/her opponent under control even if he/she runs in to the defence wall.

The half defender should create practical basic movements which, besides neutralising his/her opponent, make it possible to support his/her neighbouring teammates. In this position he/she should be able to use all the technical elements of defence well according to the game situation.

The **front defender** should develop an economical basic movement in his/her extensive movement area that disrupts the attack organisation of the opponent yet makes it possible to also move back to the defence wall if necessary. Furthermore, he/she should effectively employ individual marking and utilise his/her advantageous position to initiate fast break.



7.4. Beach handball skills (technique/tactic) and beach handball training at youth handball

Following the principle "variable play needs variable training", beach handball will develop the general handball skills at this age group. The coordinative demands are high and thus help to develop unspecific (catching, throwing, feinting, footwork) and specific technical skills (spin-shot, diver-block) and help to make them applicable in variable conditions in all handball disciplines (indoor and beach).

On tactical level, the cognitive demands (in particular decision-making aspects) are now different from beach to indoor, but these are helpful in the development of general handball playing abilities.

On physical level, running, jumping and feinting on sand, has a special impact not only on the development on muscular power, furthermore this impact strengthens the whole body and has preventive aspects in avoiding typical handball injuries.

Because the risk of drop out in this age group is high, monotonous training, exercise or general acting should be avoided. Mixing beach handball with the "normal handball routine" could help to reduce the risk of drop outs.

Concerning the competition form, beach handball is now playable at the rule level of the adults. However, there a now some major topics to learn for young players:

- In defence the "diver-block" against throws of the attackers should be trained as a beach handball specific skill. At this level the technical/tactical element "diver-block" should be trained specifically.
- The players should start to find a specific position to develop their optimal individual performance. However, the players should not be specialised on offense or defence; every player should develop the skills to act in all game phases. Only the goalkeepers could focus their specific skills.
- The cooperative elements in defence (for example between block and goalkeeper) and
 offense (for example playing and catching the in-flight-passes) should now be trained
 specifically.

Whereas the training in indoor handball is divided in the gender of the athletes, training in beach handball with athletes of all genders is possible at this age level because of the lack of intense bodily contact. Furthermore, the integration of young players in training groups of adults is not problematical.

At this age group two levels of playing beach handball could develop:

- One level is beach handball as a leisure sport: playing and exercising beach handball partly
 as an alternative to indoor handball. The aim of this level could be the variation of the
 handball activities or the enjoyment of the outdoor sport and the special feeling (sun, fun
 and holiday) of the tournaments.
- The other level is the high-performance orientation: the national federations start at this age level with the intensive scouting of specific talents; first national and international competitions are organised and conducted.



7.5. Small games / playing form

INTRODUCTION TO THE FULL GAME

At this age-category, young players should be ready to successfully start playing the full game. However, this might not be the case in countries where handball is not as developed.

One of the most-debated topics is what kind of defence should be used when introducing the full game. And more recently, should the offensive numerical advantage (7vs6 court players) be allowed?

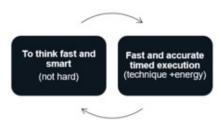
In some countries or local federations, it might be compulsory to play certain defensive formations during the entire match or during some match periods. This usually reflects methodology conceptions towards the projected players' profiles and game play.

From a defensive perspective, while some might prefer more individualized defensive forms to develop more active, anticipative, quick, smarter (looking to trap opponents and to steal the ball), stronger in one-on-one in wide-open spaces and versatile defenders, others might prefer more closed zone defences (1) to develop 'correct' defensive techniques and fundamentals, (2) to contain athletic opposition or (3) just to integrate less developed or experienced players.

While the low pressuring, shallow and closed defensive formation calls for better and fast prolong inter-passing, skilful and powerful break-through shots from greater distances, and high-technical wing throws from narrow angles, deeper defensive formations call for more free-flow play, off-ball actions, adaptable (flexible) breaking-through actions with ball (diverse fakes, penetration) and more diverse joint efforts, between exterior players and the line player.

The EHF encourages adoption of defensive formations according to the players' readiness, needs of development, and the implementation of a wide variety of defensive forms of acting, as each defence has its benefits in developing skilful, thinking, intelligent and versatile players.

At this stage, winning starts to be more important than before, but this should not have a big part in the educational and training process.



A skilful player is someone who is able to do the simple things very well (as some expert coach once said). Youngsters need to understand not only how to organise and act according to different defence structures/formations and intended strategies, but also how to solve the problems posed by the game itself or by their opponents. As attackers, they also need to realise the problems posed by different defensive forms and what best offensive solutions exist to beat them and why, while also becoming knowledgeable about their own weaknesses and strengths.

Along with each defensive configuration, besides being deeper, wider or more compact, the level of aggressiveness and (inter)action rules employed will dictate their potential impact on the players' development skills and game understanding. Let us see the most common types used in the initiation phase and a brief description of each possible effect on modelling the team's confrontation and players' (inter)actions.

Understanding the effects of a lined-up zone defence in youthful age groups

The traditional 6:0 defence system, with defenders exerting low pressure, is expected to facilitate the attacking fluidity and (inter)action continuity. The low defensive interference in the attack build-up will most likely lead to fewer game interruptions caused by fouls. It will encourage more inter-play based on fast passing between all exterior players (back and wing players). Along with being less physically strenuous for beginners, it also enables accommodating both quick, athletic players and slower, less athletic ones.

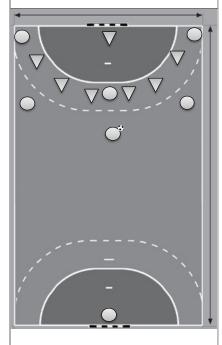
If well executed, its typical compactness limits the offensive team's ability to penetrate into key spaces, forcing the attacking players to take shots from a greater distance. But, because of puberty, with the increase of body size and muscle strength, positive affect is expected in coping with this challenge. However, low-skilled players often turn offence into a series of non-threatening passes before a 9m shot, typically over the defensive wall.

Most likely, it might inhibit fast break play as this defence is less active in constraining the attackers' actions and devalues ball stealing. Therefore, more standing and watching away from the ball might occur, along with less quick and diverse defensive movements and footwork. Still, it facilitates learning the fundamentals of 'shifting' (joint sideways moves towards where the ball is) to reduce the space between defenders, avoiding being outnumbered or in a positional disadvantage. It also allows the ball-handler's direct defender to securely step out to add pressure while having good backcourt support. Even if it is a 'soft' 6:0, without pressuring the ball handler, it puts pressure on the other team to employ fast connecting passes from side to side, wing to wing, to unbalance/disturb the defence and, therefore, creating space and advantage (positional/numerical) to attack the goal. The accurate and fast-passing consolidation is essential at this developmental stage, which is made by a simplified contextual decision-making (few courses of action are available, and the defence is more reactive). This game-play configuration also enables learning and mastering the wide attacking principles, with coordinated inward and outward moves, along switching play (crossing, inter-positional changes, circulation of players through running-inside moves or exterior circulation) and positional duels.



Still, this form of defence makes the pivot-play very hard, as there is not much space around the goal area for them to play in and to get an opening to receive the ball; nevertheless, it is easier for the attackers to know where the line players are and understand their intentions. For the player with the line player role, it demands working to get into a shielding-receiving position ('calling for the ball') while attempting to disrupt/delay the defenders' ball-oriented shifts. It also calls for more static screens to support or help a teammate to get into an open path to shoot.

6-0 defensive formation, on an official court.



What defensive game skills are boosted? Consider some:

- Protecting high-scoring space/goal better, to cover and break the connection with the line player and, also, might cause opponents to rush shots
- Denying space and outnumbered play, through 'shifting'
- Ball following pressure, through joint actions: direct defender stepping out to pressure the attacker with ball and next closest defenders provide coverage ('defensive triangle')
- Focusing on the direct defender's intentional/ actions (distant marking) and, at the same time, on ball trajectory
- Less complex and fast decision-making and teamwork communication (e.g., who should step out and who should cover the line player)
- Basic positioning, anticipating when to tackle or block, and properly time the execution of the action.

What <u>offensive game skills</u> are enhanced? Consider some:

- Enables more successful wide attacking play, pressure and switching, allowing more opportunities to employ coordinated inward and outward actions
- More inter-connecting passes between the exterior players, along with less dribbling to start the action and dribble penetration
- · Less hesitation, along with good and fast passing
- Provides more time-space to prepare ball reception (run-up approach) while moving towards space (inward and outward), to read situational cues, to make decisions and to execute the actions
- When to try for a breaking-through shot, to overcome or attract/draw the defender making space for teammates



Understanding the effects of deep and active zone defences in youthful age groups

A more profound and pressuring defence reduces offensive schemes (also called set plays) that can be performed, leading to a more open, dynamic, varied and creative game play, with more shooting opportunities from different playing positions and techniques. From a defensive perspective, it is argued that once a player knows how to defend in a wide space, managing several defensive lines, more easily can he/she interpret any defence type.

Both 3:3 and 3:2:1 formations put strong emphasis on individual responsibility and skills to cover a wide space and to actively fight for the ball, being strengthened by their staggering depth of two or three lines of players. The two-line organisation is a simpler configuration as well as the interaction principles between players of the same line and the backcourt and forward line. Knowing who should help when a defender is beaten by the attacker with the ball or who should guard the line player is easier (in theory) to interpret in a 3:3 system. Therefore, it makes sense to work this system before introducing the 3:2:1.

The 'art' of ball stealing is very difficult to embody, so, in general, this defence helps players successfully judge the attacker's run-up approach to timely contain/hold them, to read the speed and trajectory of the ball and to try for interception.

The typical big gaps between defenders ensure more time to employ help actions. Still, with such great space to cover, defensive mistakes are more evident and more serious fouls penalised with penalty shot frequently occurring, which are very demoralising. But, in general, communication is a key skill that this type of defence maximises, along with (inter)positional and spatial awareness on the court. They frequently have to make more decisions, to move quickly, move forward/backwards, to the side, as a result of "dissuasion", "closing out" and "containment"/"tackling" actions. The frequent change from running, shuffling, to sliding.

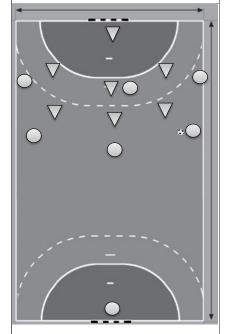
Still, against low-skilled and inexperienced attacking teams, a well-played deep and active defence might cause an extremely imbalanced confrontation between teams, leading to an overall low-quality play.

In these cases, the defending team typically scores countless fast break goals, with few players involved before a ball is lost or an action is finished.

Not knowing what to do against this type of defence, along with difficulties in dealing with defensive pressure/contact, can lead to poor/bad decisions and rushed or slow and predictable passes that are easily intercepted. The usage of this defence can also bring more frequent play interruptions caused by defensive fouls, offensive technical fouls (too many steps) and lack of interplay with attack continuity, as a consequence of undue individual initiative, dribbling and rushed penetration attempt/goal shots.

But these defences are key tools to encourage active play without the ball, the usage of simple cooperative actions with great space while being closely pressured, such as give-and-go, and generally leads to more easy open shots into spaces of great value. But, still, it makes the ball receiving on the move toward space difficult for low-skilled players.

A 3:3 defence, in an official court size.



Underlying defensive skills and game play effects

- A well-executed 3:3 defence causes opponents to commit more mistakes, leading to more steals and fast break playing
- Knowing responsibilities when attackers use switching play might be confusing, causing ball handler or line player to be uncovered at times
- Leads to more defensive decision-making and teamwork communication
- Provides more space-time to help a teammate defender that lost a duel or made a mistake.
- Encourage more initiative to dissuade opponent's play and breaking passing lanes between back players and the line player.
- Requires players to be concentrated on the direct defender's intentions/actions and, at the same time, on ball trajectory
- Fosters more complex defensive decision-making, diverse movements and footwork

Underlying offensive skills and game play effects

- Encourages players' mobility, circulation and running inside the defence (without the ball)
- Leads to opportunities to encounter situations to use in-depth joint actions, such as give-and-go, dynamic screens, rotations/exchanges, among others
- Gives more opportunities for the line player's involvement in game actions, as the open space between and behind defensive lines encourage it
- Enables one-on-one play in wide spaces, with and without the ball
- Increased decision-making under ball pressure and close marking
- Stimulates more one-on-one play, with/without dribble to approach the defender, dribble draw and dribble penetration
- Leads to more open scoring opportunities with wideopen angles and facilitates wing shooting (more space width).



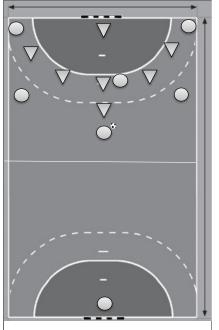
Understanding the effects of a two lined-up zone defence in youthful age groups

The classic 5:1 defence is, generally, more in-depth pressure and active than the 6:0, and has the particularity of having a centre-forward defender, aiming to cover the middle back attacker (centre-back), to disturb and slow down ball circulation between the back players. This defender also has the role of denying space in the area in front of the goal, helping their teammates when a right/left-back player employs any goal threatening trajectory towards the middle. Still this defence is more "vulnerable" at the sides, enabling more interplay between the back (left/right), line player and wings.

A well-played 5:1 defence is very effective in destroying the opponent team to build up the attack, play rhythm and attack continuity, as well as its possibilities to easily shoot from the centre; it also causes opponents' rush towards scoring attempts and predictable passes that are easily intercepted. Therefore, it might be very challenging for a less experienced youthful team to build up its attacks against this type of defence.

Nevertheless, this defence originates more opportunity to switching play and players' mobility, through the circulation of players from an exterior position (wing/back) or the line player runs in front of the defence to draw the front defender out of position and to open up spaces that the attacking team can exploit. Given the defence structure, the offensive 3:3 transition to 2:3 (from one to two line players) is also a favourable strategy to create more and diverse courses of action. Anyway, these changing game situations most likely result in more spontaneous individual and group divergent actions and improvisations.

A 5:1 defence, in an official court size.



What advantages does a 5:1 defence bring? Consider some, from a defensive perspective:

- It allows protecting central-scoring area better
- A well-played defence gives greater opportunities to steal the ball to quickly create open goalscoring chances at the other end.
- Stimulates dissuasion and breaking pass lanes, particularly by the centre-forward actions
- Calls for more defensive coordination and teamwork to keep the defence balanced on the ball side, and to cover the line player

From an offensive perspective:

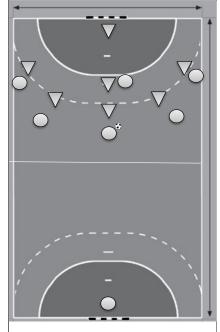
- Encourages more clever joint actions, such as switching play, circulation of players, positional swaps/exchanges and active play without the ball to create more paths of actions for the attacker with the ball
- Triggers back player initiation in using the space behind the advanced defender
- Requires extreme focus and awareness of situational constraints provoked by the front defender and, eventually, pressure-traps (unexpectedly created by a defender away from the ball) to "easily" avoid losing ball possession.
- Requires playmaker to actively and cleverly move without ball to contradict the front defender's pressure: to prepare ball reception (wide side trajectories) or cross/switch according to game flow (taking advantage of front reaction to left/right back players wide inward trajectories with ball toward the middle)
- Stimulates more coordinated play between the back players and the back player and the line player



A 1:5 formation might be considered a "hybrid" defence where players act a lot like a tight individual defence, still in confined zones around the goal. This system of play thrives on developing individual defensive skills (duels), without completely neglecting the cooperative work principles.

As a basic action rule: the on-ball defender closes out and plays tightly, tackling/containing the attacker, with and without contact. On the ball side, the defenders (one pass away) have the responsibility to attempt to break the passing lanes, along with covering the space between the defenders to help, if needed. In the zone away from the ball, an individual defensive responsibility usually prevails, with the defenders being aware of ball trajectory and their direct attackers' positioning, to avoid any running-inside manoeuvre behind the forward defensive line.

A 1:5 defence, in an official court size.



What advantages does a 1:5 defence bring? Consider some, from a defensive perspective:

- A well-played defence causes a lot of physical duels and footwork. It also stimulates 2-on-2 play, between exterior players (in the same line of action) and exterior players with the line player (with staggered lines of action).
- Promotes concentration and court/peripheral vision
- Stimulates the development of physical courage and toughness
- Promotes individual defensive responsibility by moving forward/backward, sideways to block an attacker's path.
- Facilitates knowing responsibilities and who should guard the line player and when an exchange should be made

From an offensive perspective:

- To contradict the forward defensive positioning demands making space before receiving the ball to avoid being tackled
- Near ball receiver should adjust position (moving backwards) to make space and to support a teammate in possession of the ball.
- Encourages players' circulation/running inside to break in and out (without the ball) the forward defensive line
- Stimulates 1vs1 (with and without the ball) in wide spaces along with lead way actions, dribbling and dribble penetration
- Inhibits fast passing and ball circulation
- Leads to opportunity to encounter situations to use joint actions, such as give-and-go, dynamic screens, rotations/exchanges, decoy runs, among others
- Increases decision-making under ball pressure and close marking
- Leads to more open scoring opportunities with wideopen angles; and facilitates wing shooting.



Teach/empower players to be thinkers while playing any type of defence. This can only be reached, though, once the players understand their roles, are confident in themselves and where they should be positioned and what they should do in every situation. Then, they can start anticipating what the offence will do and to be more effective.

GOALCHA Street Handball

Team size: 3vs3 or 4vs4,

Playing court size: 1 Mini Handball goal Ball size: Goalcha Street Handball

Competition rules:

- 3 steps, no dribbling
- No referees
- After goal / goal attempt teams will change
- Can be played indoor and outdoor

Restrictions: not permitted to:

no body contact

(for details see https://goalcha.com/goalcha%ef%b8%8f-street-handball/)

7.6. Competition form

Introduction

At this stage, it is assumed that all players are already playing at a regional or national level every week. And, progressively, the focus is on performance and results.

Now the physical performance differences between boys and girls becomes noticeable due to boys' quick increase in body size and strength, which makes it very hard for girls to play with boys with regular handball rules.

When deliberating about defence types, coaches should be involved in the decisions. Part of coaching young players is evaluating their teams' learning needs and strengths to maximize their potential and make the competition a good learning experience.

As it is not rare to have young and less experienced referees in this age competitions, special attention should be placed on the quality of the referee-coach and referee-player interactions in terms of instructional and emotional support.

Competition settings should be conducted according to the following principles:

Regular double-high intensity matches per week is not recommended, as it can lead to a physical and cognitive overload, along with an increased risk of ACL injuries, particularly among girls.

A player should only play for two age category teams. Wishing to play more than two (2) years above their age should be assessed and approved by the association/federation responsible for the competition.

Mixed defences, where the majority of the players are performing a zonal defensive play while one or more players are individually marked (usually the best ones) should not be allowed.

Competition forms

Teams put into regional competition groups

1 competition day / month during school year (3 match day in autumn, 3 in spring) where every team plays 2 matches per day

Throughout the championship year every team plays with each other twice

Playing court size: 40X20 Goal size: 200x300 cm

Ball size: No.1 (synthetic or leather)

Playing time: 2x20 minutes (time is only stopped when injury)

Team timeouts: once 1 minute / half / team

Suspension time: 1 minute

Competition rules:

- a team consist of maximum 14 players
- every player registered for the match must play at least 10 minutes (use automatic signal)
- scoresheet needs to be filled, the final score registered, championship table published

Restrictions: not permitted to

- use glue
- mark somebody (no one-to-one defence)
- substitute players for attack or defence only (no fixed position)
- a player can play maximum 2 age category teams (own age group and one above) for the same club



7.7. Workshop leader / coaches' profile

Education level: Handball Coach level 2

- The content of the demands:
- coaching theory: anatomy and biomechanics, physical training
- coaching, development, leadership, how to coach a team, problem solving, match analyses
- game understanding
- attacking game: personal attacking technique, models of attacking game
- defence game: personal defence technique, defence forms and systems
- playing as a goalkeeper
- developing competitiveness
- enthusiasm for handball in a positive and safe environment
- the club's or federations coaching policies
- personal coaching career planning



8. JUNIOR HANDBALL (AGE 17 — 21 YEARS)

8.1. Physical aspects

STATUS

The fifth stage of long-term performance development and the third and final stage of systematic, handball-specific performance development, transition to high-performance training!

Second golden age of learning. Completion of the development from child to adolescent, increase in strength, harmonisation of movements, enormous progress in performance - extensive and intensive training - perfection of sport-specific techniques and acquisition of discipline-specific condition.

Optimise the engine and learn to compete. Optimise fitness preparation and sport, individual and position-specific skills as well as performance.

General goals:

- Further development of coordination, strength, speed and endurance to set the basis for high-performance training.
- Acquisition of competition-specific techniques.
- Development of competition-specific tactical knowledge.
- Development of psychological-emotional skills through experience in national and international competitions.

FOCUS

- Special sport-specific coordination training. Introduction to high-performance strength training at all levels (special core strength training, special strength training with additional weights)!
- Special speed training (even through strength application). General endurance training.
 Special technique training. Special tactical training.
- Focus on recovery training and injury prevention programme

Strength

Training of the special core strength. (Sub) maximum training with additional weight. (Sub) maximum free weight training. Submaximal bounce training. Learning of special reactive and explosive strength training (upper and lower body) – load and performance focused.

Endurance

Special endurance training using a wide variety of training methods in different endurance areas (aerobic conditioning – aerobic capacity – anaerobic conditioning – anaerobic capacity)

Speed

Special sport-specific speed training and submaximal jumping power training (also via power application). Learning of special reactive and explosive strength training (also for the upper body). Even in combination with endurance loads (speed endurance – focus on max acceleration / deceleration).

Coordination

Special sport-specific coordinative training! Special coordination exercises should also be combined with special speed and strength stimuli! Possibly even a combination with sport-specific endurance fatigue loads. (Caution: Fatigue impairs the technique!)

Mobility

All forms of mobility training as required. Full range of motion (strength) training, stretching, influencing connective tissues – myofascial release - black roll, trigger points, etc.

8.2. Mental / social aspects

(dependent on sport progress – beyond end of adolescent growth spurt. Athletes generally at provincial, junior national or early national level)

Requires specialised coaching in a specialised training environment.

The stage for specialisation in sport, position or event then specific training design for physical conditioning and technical/tactical preparation to maximize development.

Test tactics and practice under competitive conditions.

Evidence-based training built on testing to identify strengths and weaknesses. Optimise ancillary capacities and balance sport, work/school, and family/friend life obligations.

Advanced mental preparation and practice under highly competitive conditions. Strengthen ethical approach to sport including respect for opponents, fair play and commitment to doping-free sport.

Training hours are increased, and this is the time when an athlete will recognise whether they have the ability and dedication to be an elite performer at their sport(s). To do this they must spend more time refining skills in practices that consist of high-volume and high repetition.



As part of their time management, athletes also must learn to delegate time between training, recovery and injury prevention/management, and of course performance. Athletes will acquire these skills by learning more about nutrition, strength and conditioning, mental skills development and the importance of rest and recovery for the body.

At this point, athletes are seeking out any and all resources that will help them get a slight edge on their competition and so they can perform consistently at a high level. As a result, by the latter half of this phase, athletes transition from a focus on specialised training to being focused on competition.

Athletes are specialising within their primary sport for selection to international age group competitions.

8.3. Handball skills (technique / tactics)

After initially allowing players to adapt to their chosen positions, during the ages of 17-18, priority is given to consolidate the knowledge of the different positions and this should manifest itself in the effectiveness of the team. However, in order to encourage the player's continual personal development, it becomes necessary to extend knowledge of each position in attack and in defence.

The ages of 19-20 is the time period are when the player has the last chance to acquire those elements that he/she missed out on during development. As the result of a progressive and structured training over the years, players by this stage can reach such a level of technical-tactical knowledge and physical condition that it makes the smooth transition into senior handball possible.

Recommended training sessions: 5 - 6 per week

Aim: To consolidate the skills of playing handball by:

- attaining a high level of collective work
- improving the effectiveness of the attack and defence
- achieving a stable individual performance
- developing a basic familiarity of neighbouring positions
- facilitating the continuation of personal development
- compensating for missing technical-tactical elements

TECHNICAL TRAINING

The constant practice of ball handling skills such as catching, passing and dribbling as well as mastering the basic movements of the attacker and defender should still be maintained at this stage. However, instead of practising them in the main part of the training, they should be included in the warm-up phase. Furthermore, during practice, space should be allowed for players to develop other passing forms according to their individual abilities.

With the acceleration of the game and the increased number of goal shooting techniques, it becomes necessary to further extend the repertoire of falling techniques. That is, the correct technical execution of falling by tumbling and by sliding on the chest need to be mastered.

In order to further increase the effectiveness of the player's activity in attack and in defence, different techniques should be introduced according to the positions.

Thus, in order to facilitate break-through attempts, players in the back court and centre back positions should use combined faking techniques. To shorten the process of building up momentum, different step combinations should be used while to increase the variety of goal shooting techniques, quick overarm shots executed from the same leg as the throwing arm need to be learned. Curved and sliced jump shots also need to be developed from the jump shot.

Wingers playing on the opposite side of the court in relation to their throwing arm should learn the sliced shot by pushing off from the same leg to the throwing arm in order to increase the shooting angle. For a wider repertoire in completing the attack spin, lob and volley shots should be mastered.

Besides constantly practising the offensive blocking techniques, line players should master the execution of the dive shot to both sides with the appropriate falling techniques. To facilitate better maintaining a position and getting into the scoring position easier, catching the ball with one hand and with alternate hands need to be mastered.

While practising goal shooting in every attack position, individual attempts should be encouraged without restrictions to help develop other scoring forms.

In defence, every player independent of his/her position should master all the technical elements and try to execute them effectively in different defence situations.

At this stage, the aim of the goalkeeper's practice is to extend his/her technical knowledge (e.g. saving from the wing by moving back to the near post) and consolidate the saving style best suited to his/her physical and psychological abilities. In order to achieve this, besides constantly refining the techniques of saving long range and side shots, confidence in saving close range shots should be developed. Both techniques of saving in a clear scoring chance and of saving lob shots should be drilled in combination with court players practising fast breaks. While penalty-throws can be practised in a competition with court players or by simulating game situations during different parts of a training. After developing a confident



saving style, space should be given to the goalkeeper to try other saving forms in order to widen his/her saving repertoire.

In order to facilitate the player's smooth transition into senior handball, techniques which were somehow missed during the previous years need to be learned now while still continuing with specialised practices.

TACTICAL TRAINING

In attack, the player's tactical repertoire should be further extended by practising attack against different defence systems. Thus, in order to be more effective, attack against the different formations of man-to-man, zone and combined defence systems need to be practised.

A significant indicator of the team's tactical preparation is how well players are trained when attacking in different game situations. Thus, special group and team tactical elements as well as set moves should be drilled to utilise the situation of numerical advantage and maintain effectiveness in numerical disadvantage as well as to improve the variety of the attack when there is numerical equality.

In defence, with the introduction of the 3:2:1 zone defence as well as the 4+2 and 2+4 combined defence an effort should be made to create a modern, pressuring defence. Hence, with the knowledge of individual defence, zone and mixed defence systems, an effective defence against different attack systems now become possible.

However, the player's tactical repertoire would not be complete without acquiring special group and team tactical elements to increase the success of the defence in different game situations. Thus, players should practise to utilise numerical advantage and to avoid conceding a goal when they are in numerical disadvantage while becoming more efficient when there is numerical equality.

The effectiveness of defence in special circumstances can often determine the outcome of a game. So, players need to practise defending when there is a throw-in or a free-throw close to the goal area, as well as taking the appropriate positions to catch the rebound ball when there is a penalty shot.

In order to encourage the player's continual personal development, it becomes necessary to extend the knowledge of each position an attack and in defence.

Thus, the winger should creatively take part in the game and should be able to form a scoring position both in front of and behind the defence wall for himself/herself by running in and with faking combinations. He/she needs to develop the execution of the sliced shot so that he/she is able to shoot well from an acute angle and while pushing off from the same leg as his/her throwing arm.

The **line player** should know well the possibilities of setting up a scoring position for his/her teammates or for himself/herself and utilise his/her chances with a good scoring percentage. For this, he/she should master the technical-tactical implementation of blocking/freeing as well as that of the dive shot into both directions with the appropriate falling technique.

The back-court player should increase his/her technical-tactical knowledge so that he/she is able to set up a scoring position directly for himself/herself or indirectly for a teammate. He/she should perfect one through-shot from the ground and one from the air so that he/she can be a constant threat to the goal.

The **centre back** should be able to direct the team to play the team tactic and to change from one variation to another according to the game situation. He/she should also recognise and then utilise the possibilities presented by the opponents' errors as well as attempt direct scoring.

The **goalkeeper** should consolidate his/her modern, offensive saving style and adapt it to different game situations in defence. He/she should direct the defence activity of his/her teammates and consciously utilise the positioning of the defenders when saving shots.

The **outside defender** should further develop his/her effectiveness in 1vs1 situations by using extensive footwork and by utilising his/her natural body strength. He/she should try to steal the ball if it is possible and be ready for fast break even with a pre-start off.

The half defender should be determined and solid using his/her natural body strength to the limit of the rules when tackling and blocking on the ground or in the air, individually or collectively. He/she should master the group tactical elements of defence and particularly when in the centre half position, he/she should direct the team's defence activity.

The **front defender** should be so well trained tactically that in combined defence he/she is able to withdraw a particular attacker from the game with individual marking while in zone defence he/she is able to disrupt the attack organisation and perhaps even steal the ball. Furthermore, he/she should also be able to alternate these duties according to the progression of the defence.



8.4. Beach handball skills (technique/tactics) and beach handball training at junior handball

Independent of the level of performance the quality of training decides how fruitful both disciplines go hand in hand: if the training quality in indoor handball is good, every athlete develops in beach handball, if the training quality in beach handball is good, every athlete develops in indoor handball.

Also, in this age group beach handball could be used as an attractive and joyful alternative to the indoor discipline. An attitude of "play beach handball with your friends and your team, having fun in the sun at the beaches" is not conflicting with the general goals and aims of a handball life.

However, if beach handball is played with a clear performance attitude, now specific adaptions of training are necessary:

- Sand has different demands on muscular power and muscle activation. Therefore, sand specific adaption of physical exercises should be planned.
- Goal-oriented specialisations in consideration of the game positions and game functions could be focused for all athletes. Different to indoor handball in beach handball it is common, that some players just play in defence and others only play in offence.
- Group tactical behaviours are now in the focus of training and competitions. General group tactics will be developed at this age level, for example
- » specialist in the centre position
- » specialist on the wing
- » 3:1-attack
- » 4:0-attack
- » 3:0-defence
- » 2:1-defence
- » One-on-one marking defence

In consideration of the mental aspects of the game, beach handball on a competitive level could be helpful to develop the personality of the athletes. In comparison to indoor handball, where decisive situations (tight scores shortly before the end of the game) usually occurs just once per game, these situations could occur up to five times per game in beach handball:

- 1. At the end of the first set, athletes who are able and willingly to decide such situations are needed.
- 2. If there is a tie at the end of the first set, the golden goal situation is one of the toughest decisive situations in sport.

- 3. In the second set the same two pressure situations could occur.
- 4. The shoot-out is always a tough situation, where the personality of the players is challenged.

Because of the low number of players per team, the probability is high that nearly every member of the team has an active role in such decisive situations during the course of a tournament.

Therefore, beach handball at junior level is a perfect learning space for how an athlete can handle pressure, responsibility, social support as well as success and failing. "I've failed over and over and over again in my life. And that is why I succeed" (Michael Jordan). Beach handball increases the possibility for handball athletes to fail and succeed in tough situations, and therefore, beach handball increases the possibility to learn and to develop a stable and healthy personality.

8.5. Small games / playing form

GOALCHA Street Handball

Team size: 3vs3 or 4vs4,

Playing court size: 1 Mini Handball goal Ball size: Goalcha Street Handball

Competition rules:

- 3 steps, no dribbling
- no referees
- after goal / goal attempt teams will change
- can be played indoors and outdoors

Restrictions: not permitted to:

no body contact

(for details see https://goalcha.com/goalcha%ef%b8%8f-street-handball/)



8.6. Competition form

Teams competing according to the European and national playing calendar in a championship format where each team plays with every team home and away.

• Playing court size: 40x20

• Goal size: 200x300 cm

• Ball size: No. 2 (synthetic or leather)

• Playing time: 2x30 minutes (time is only stopped when injury)

• Team timeouts: 3x1 minute

Competition rules:

• a team consist of maximum 16 players

• scoresheet needs to be filled, the final score registered, championship table

Restrictions: not any specific

8.7. Workshop leader / coaches' profile

Education level: Handball Coach level 3

The content of the demands:

- coaching: individuals in a group
- coaching theory: biomechanics, physical training, mental training
- comprehensive developer of features
- taking responsibility for developing into a top player as part of a goal-oriented and solid group
- the principles of team play and the phases of the game
- models of attacking game
- · models of defensive play
- · game understanding
- playing as a goalkeeper
- game analysis
- the coach understands that the total control of life affects the overall development of the athlete



9. SENIOR HANDBALL (AGE 22 — 44 YEARS)

9.1. Physical aspects

STATUS

Senior Handball is the final stage of athletic preparation.

Maximize fitness preparation and sport, individual and position-specific skills as well as performance.

All of the athlete's physical, technical, tactical (including decision-making skills), mental, personal and lifestyle capacities are fully established, and the focus of training has shifted to the maximization of performance. Especially bring performance when it counts!

Approaching the individual peak performance!

Full exploitation of the competition-related adjustment and development potential! Means and methods are used that require well-developed fundamentals and a large load tolerance. Target: Top performance in competition.

Another aspect of performance is to maximize recovery and regeneration programmes (periodise recovery). Allow frequent preventative breaks to prevent physical and mental burnouts.

FOCUS

Further development and maintenance of physical performance. The physically athletic training units should be used very individually and correctly over the course of the training year.

Special needs of athletes should be considered.

Strength

Individual adapted and well-timed strength training. In preparation period focus on hypertrophy. In competition period focus on speed strength, plyometrics and individual injury prevention.

Endurance

Individual adapted and well-timed endurance training. Endurance development within the technical – tactical training. Additional endurance training, especially in the preparation period in the aerobic conditioning.

Speed

Involvement of speed training in technique and tactics training. If necessary, integration of the coordinative speed training into the warm-up process.

Coordination

No general versatile coordination training necessary. Possibility to integrate coordination elements in the warmup process.

Mobility

Individual adapted and well-timed mobility training. All forms of mobility training as required. Full range of motion (strength) training, stretching, influencing connective tissues – myofascial release - black roll, trigger points, etc. Isolated mobility training sessions or including mobility contents in warm up or cool down process.

9.2. Mental / social aspects

At this stage, athletes should have developed all of the technical, tactical, physical and mental skills necessary to compete at the elite and professional levels.

Their goal is the pursuit of excellence and external success like winning medals, trophies and championships.

It is important for the athlete to have a trusted support network that helps them to successfully perform day in, day out. This network includes family, coaches, nutritionists, doctors, physical therapists, masseuses and mental skills coaches (e.g. sport psychologists). Often you will see this team of people as an athlete's entourage that accompanies them wherever they go.

Developing high performance athletes capable of winning at the highest levels of international competition and bringing home medals at European, World, Olympic or Paralympic level.

Outstanding athletes who have a serious chance of playing for their national squad. In the second phase of this category (approximately aged 30+), players have mastered certain skills and are now applying these skills to a career and in life. As a result, they also start to think about passing on their knowledge to the next generation.

Thinking about a dual career is of great importance during this development phase.

If athletes have enjoyed positive experiences in sports throughout their childhood, teenage years and adulthood, it is highly likely that they will choose to stay active for life. For example, if an athlete played handball at any competitive level, they will identify themselves as a handball player and might join a club playing for a veterans team later in life as a means to exercise and be part of a social group that shares similar interests (in handball).



9.3. Handball skills (technique / tactics)

By constantly repeating and systematically extending the knowledge of handball, linking each age group and the harmonious development of the young player become a possibility. A thoroughly trained young player can transfer easier to senior handball where individual skills and performance can be further polished. By the ages of 22-23, players usually settled into a particular playing position in attack and in defence and should have learned all the skills necessary to play well in these positions.

As players change clubs several times during their senior career, it is important for them to be able to adapt to new playing styles, to integrate into new teams and thus, to slightly change their playing philosophy from time to time. By going through this journey and experience, players also physically, mentally and psychologically grow into a much more competitive style of handball and around the age of 27-28 years they can reach their potential. Injuries and recovery, general health and fitness, personal life and ambition will then decide how long a handball player can pursue a professional carrier.

Recommended training sessions: 6 - 7 per week

Aim: To master the skills of playing handball by:

- attaining a higher level of teamwork
- improving the effectiveness in the chosen position
- achieving a stable individual performance in attack and in defence
- developing mature tactical knowledge and thinking
- adapting to the challenge of changing teams
- continuing personal development and self-management
- creating an individual playing style and playing charisma
- maximising individual potential, managing own player's career

TECHNICAL-TACTICAL TRAINING

Every technical element has its tactical content, and every tactical manoeuvre has its technical criteria. Therefore, technical and tactical training can rarely be separated. In senior handball tactical training comes to the fore, but it is important to maintain and perhaps further refine technical skills. Then, specific and individual conditioning training will be the instrument to raise the players' performance to another level. Senior handball players have to master the following tasks in their playing position.

THE WINGER

In this position it is important to find the right balance between staying in the corner and waiting for the right chance to score or running in behind or in front of the defenders and getting more involved in the collective work of the team.

Just by positioning at the junction of the side and outer goal-line, the winger helps to stretch out the defence wall, thus opening gaps for the line player and back teammates to break-through or for through-shots. This type of winger often attempts to break-through on the outer side of the first (outside) defender, in the hope of directly scoring or winning a penalty shot. Starting from the corner is better for building up momentum because the winger can run up on a longer path and the direction of the jump corresponds to the direction of the shot, consequently, he/she can execute the appropriate shooting technique in more advantageous conditions. Nevertheless, a well-skilled winger, even at the expense of a little body contact, approaches the facing defender because with this, the aimable surface of the goal can be increased significantly.

An important part of the winger's preparation duty is the dynamic running in behind the defenders without the ball. By occupying a second line player position for a shorter or longer period of time, the defenders' attention can be taken and divided and with blocking/freeing, he/she can even get involved with scoring. On the other hand, the wingers running in along the free throw line often attempt unexpected through-shots or changing position with the backs. Although the winger's chance to score is restricted because of the reduced shooting angle, his/her chance can be regained with appropriate technical skill and by using specialised shots. So, apart from the well-known sliced shot, lob and spin shots or - as a combination of both-spinning lob shots need to be mastered. Also, effective fast break cannot be played without the good anticipation and pre-start-off of the winger.

LINE PLAYER

Entering senior handball, the line player should develop a character: either to utilise the body power primarily to block for the backs or, besides blocking, to strive to move into the opening gaps to receive a pass and to ultimately try and score. Whatever the character is, by moving within the defensive wall the line player should: hold the defenders' attention, obstruct their attempts to block goal shots and to tackle the backs, thus force the defenders into the goalarea line and also to impede the goalkeeper's vision of the game.

The line player's possibilities of blocking from the front, from the side, from the back and with the chest, with the side and with the back are abundant. However, a good line player should be able to use them interchangeably according to the game situation. Nevertheless, this activity is not confined to blocking only because by freeing, the line player can also get into a good scoring position. When one of their teammates runs in to the defence wall or another line player enters the court, the line player should be able to deal with the changed situation. In relation to each other and to the longitudinal axis of the court, in a 7vs6 situation the two line players can position themselves symmetrically or asymmetrically close or farther apart,



depending on whether their purpose is to force the defenders to step together or whether their purpose is to stretch out the defence wall.

Similarly, the team's tactics determine whether the line player plays in either a localised manner or continually moves among the defenders. Although the line player should not anchor himself/herself for a long period of time, it is not advantageous if he/she always runs in the defenders' line, causing unnecessary tackles. Therefore, it is fitting if he/she changes his/her place periodically to follow the path of the passes or to move against them.

By moving out of the defence wall the line player can change position with one of the backs or most often with the centre back before moving back to the goal-area line, on the other side of the attack. Particularly in difficult game situations, a line player with the ability to recognise a good position and to improvise can be a great a support to his/her teammates. When there is individual marking, numerical disadvantage or a danger of passive play, attackers often make a forced pass to the line player in order to earn a free-throw and thus, keep possession of the ball or even win a penalty shot.

The characteristic feature of the line player's position is that although the preparation work is vital, the scoring opportunities are limited and primarily depend on the teammates' activities. However, he/she can also encourage them to pass it to him/her with good positioning, by freeing himself/herself and moving into open gaps, thus contributing to his/her own scoring success. Depending on the game situation, the most basic falling shot – the dive shot – to both sides and particularly by pushing off with both legs need to be part of the line player's shooting repertoire.

THE BACK PLAYER (left back and right back)

The performance of the back-court player, directly or indirectly, decisively influences the final result of the game therefore, filling this position with the right person is vital in relation to a team's success. By scoring from long range, the back-court player forces the defenders to move more in depth and to fall out thus loosening their defence wall so indirectly, he/she contributes to the effectiveness of the line players and wingers.

Back court players can be further specified: typical backs are usually solidly built and very powerful players who by utilising these superior qualities, concentrate mainly on scoring from long range with through-shots. Other backs instead may not be as tall and strong but technically better skilled who, besides effective through-shots, often attempt to break-through and are more involved in the collective teamwork. Whatever the type is, the back should suggest, even throughout his preparation activity, an attempt to score, thus implying constant threat to the goal. This can be accomplished effectively if he/she is in constant motion and his/her footwork is continuous and economical with good ground contact in order to quickly change direction at any time. The preparation activity of the backs is further made colourful with shooting and passing fakes, position changes, occasional blocking and these contribute to setting up a position to score for themselves or for their teammates.

A good back court player represents irreplaceable strategic power: they are the backbone of the team, involved in almost every action of the team's attack. In the systematic attack, a lot of set moves are built around their shooting potential. By imitating a shot at the goal, they engage the attention of the defenders and divert them from the real action, facilitating the winger's running in and the line player's movement yet often they conclude the manoeuvre as well. A successful back has to know all types of through-shots and at least one shot from the ground and one from the air needs to be mastered. Besides this, he/she often finishes breaking-through with a goal shot in the zone of close-range shots, therefore, he/she needs to be familiar with the long jump and dive shots as well.

THE CENTRE BACK (playmaker)

A player with leadership qualities who is extremely skilled and has good theoretical knowledge of the game is ideal for this position. He/she has to know the technical and tactical elements of handball at least at an average level as well as his/her teammates and their playing style. Thus, this position requires prosocial qualities and a high level of playing intelligence.

On the court the centre back is the team's conductor and the 'coach's right hand'. He/she has to be completely familiar with the tactical plan the team has to carry out in a certain game situation as well as being an initiator and exemplary executant of the coach's tactical instructions. Therefore, he/she has the greatest responsibility in the team as he/she is not only responsible for the way he/she plays but also for the performance of the whole team. As a result of these duties, the centre back has to cover an extensive area on the court. However, the player should position in a such a way that he/she does not leave this area for a long period of time, is always ready to assist teammates in either direction and can be easily found for forced passes.

During the preparation activity, the centre back has to direct and coordinate the predetermined duties of the attack, the individual and group activities of the players and often he/she personally sets up a position for scoring. This complex duty requires tactically creative work and sometimes improvisation as well: he/she should survey the happenings on the court, see the possibilities, be aware of the chances that suddenly present themselves, set up positions for his/her teammates and modify the original tactical plan if necessary.

As a result, he/she should always be in motion, change position continuously with economical footwork which makes it possible to act quickly anytime and in any direction. For this, as for the backs, the piston movement and the technical elements with/out the ball connected to it form a sound basis. Since the centre back has the most contact with the ball during the game, catching and throwing it with various techniques need to be executed with confidence. Through technical elements executed with the ball, position changing, blocking and passing to the line player, the centre back has contact mainly with the line player and the backs and often even takes their positions temporarily.

The fundamental element of the systematic attack is the skilful and experienced centre back, so several prescribed manoeuvres are built upon his/her play and he/she is most commonly



the initiator and often the finisher of these moves. Particularly in special game situations, the centre back's ability to recognise a good position, appraise the situation, decide quickly and act adequately is important. Besides the organisation and preparation of the team's attack, attempting a shot is a fairly important part of the centre back's activity. The constant and authentic scoring attempts make the opponent react and these defender's movements open up further chances for attacks. Therefore, a good centre back must be a good left or right back as well and similar to them - trying to score with quick and unexpected through-shots over or among the defenders.

THE OUTSIDE DEFENDER (1st defender)

The outside defender's primary duty is to neutralise the winger within his/her defending area. With zone defence or with occasional marking the defender should restrict the opponents' movement as much as possible, obstruct any of his/her scoring attempts and if the opportunity arises attempt to steal the ball. For this the 1st defender should have an economical basic movement that makes it possible to constantly keep the attacker under control.

So, the winger can be obstructed from catching the ball and by nipping his/her attack attempt in the bud, he/she can be excluded from the play. If the opponent in the corner received the ball and is ready to shoot at the goal, the 1st defender should restrict the winger's shooting angle as much as possible. If the winger runs in, the outside defender often switches to cover the back or temporarily mark the line player. In order to achieve these tasks and to facilitate a possible rapid start-off, the outside defender should stand in a diagonal stance, his/her sight should be mainly fixed on the path of the ball yet with peripheral vision he/she should still follow the winger.

Naturally, the most effective form of defence is to steal the ball and with this not only spoil the attacker's attempt at scoring but give the defenders a chance to start a fast break. Since the 1st defender often shifts towards the middle and leaves the goal area line, a long pass between the backs can be snatched away with a well-timed interception.

THE HALF DEFENDER (2nd and 3rd defender)

The role of the half defender is made more difficult as his/her playing section is the most frequently used area for attack build up and the main scene for attempts at through-shots and breaking-throughs. The basic principle that defenders should position themselves on the imaginary line connecting the attacker to the centre of the goal needs to be slightly modified in this position. This is because the attacker usually moves towards the oncoming ball thus it is necessary for the defender to move with him/her. Furthermore, in order to avoid a quick and unexpected goal shot, it is advisable to move a little closer towards the attacker's throwing arm to cover it.

The half defenders' main defence duty with zone defence or sometimes with individual marking is to restrict the opponent back court players' as well as the line player moving possibilities in order to obstruct their scoring attempts, perhaps even stealing the ball. When

the attackers approach with great momentum, the half defender should try to frustrate any attempt at shooting or breaking-through by tackling. Besides being centrally located, they have to take part in organising and directing the defence. Not surprisingly, most of the defence specialists play in the middle defender position. The line player should never be left unguarded, so half defenders need to pay him/her extra attention taking on and guarding, then handing on the line players, while hindering him/her from catching the ball. Due to their position, the half defenders can attempt to steal the ball with various techniques: while the attackers make a long pass or pass to the line player it is best to try to intercept the pass or snatch the ball out of the attacker's hand while he/she approaches the goal with high dribbling.

The extensive defending area of the half defenders not only facilitates but demands the coordinated work and help of teammates. If the game situation requires, he/she has to be flexible to change position and help out his/her teammates as well. The help and cooperation of neighbouring half defenders is the basis for an effective defence, particularly during defence against the line player when frustrating different types of offensive blocking or when blocking goal shooting as a group. In the half defenders' area and particularly in the 3rd position, cooperation with the goalkeeper is an important duty: to cover as much surface of the goal as possible and to give the goalkeeper a point of reference must be consciously practised.

THE FORWARD DEFENDER (point defender)

A player with very good footwork and a sense for anticipation can successfully fill the position of the forward defender. These features are necessary for changing direction and place quickly in relation to the opponent, for disturbing the attack organisation, for common tackles, for individual marking of a dangerous opponent or for attempting to steal the ball in the back court. In all these cases, he/she needs to maintain a solid, balanced position so he/she should take a low defender's basic position from which quick shuffle or turning steps with good ground contact ensure his/her quick reactions. If done properly the forward defender's duty is all-consuming and tiring, therefore, the player needs to use his/her energy economically, he/ she should not waste it unnecessarily but rather he/she should restrict his/her movement area to reasonable limits by concentrating on a specialised region.

The forward defender's primary defence duty is to filter the attack, neutralise the initial attempts of the attackers and possibly steal the ball by either marking a dangerous opponent or by frustrating the attack organisation. When marking an opponent in combined defence, the forward defender should position himself/herself to keep the marked player as far from the goal as possible, perhaps even take him/her out of the score dangerous area. If his/her duty is to frustrate attack organisation, the forward defender should position himself/herself in front of the zoning teammates so that just by being present, he/she obstructs the attackers' movements and their ball passing. In this position, the forward defender has the best opportunity to steal the ball.

Regardless of whether the forward defender marks someone or frustrates the attack organisation, he/she should always endeavour to exclude at least one opponent from the play. Besides this, the forward defender plays a reverse role, always moving wherever



teammates get into trouble in order to equalise their disadvantageous position. With good spatial awareness and appropriate positioning, the forward defender should always be ready to defend effectively against the different types of offensive blocking by using the processes of evading or switching particularly against shadow blocking and guiding into blocking.

THE GOALKEEPER

In handball and especially in defence, the goalkeeper has a particularly important scope of duty. To do justice to this position, the goalkeeper requires special characteristics: above average height, particularly good flexibility, excellent reflexes, mental strength, courage, self-confidence, determination, will-power, ability to recognise a good position and above all a willingness to save.

The goalkeeper's primary defence duty is to protect the goal and thus prevent scoring. During youth and junior ages, specialised techniques should have been attained. Now, in senior handball, they must be executed successfully according to the given circumstances and against a particular opponent while developing a certain style and charisma. Regardless of his/her style, the process of saving needs to be followed to the best of his/her abilities: gaining information about the positioning of attackers, defenders and of the ball; making a decision and selecting the appropriate saving techniques; and then executing the saving movement without hesitation.

Due to his/her position, the goalkeeper has the best view of the whole defence, thus besides his/her main defence duty, his/her additional role is to guide the defenders. By giving brief positional instructions, he/she directs the movement of other teammates not only facilitating their defence work but indirectly aiding his/her own saving as well. It is particularly important to inform the defenders about the line player's positioning behind them and how much space the winger should be given when shooting at the goal.

During the game, the situation often arises that the goalkeeper has to leave the goal area and take part in the attack as a court player. For example: he/she executes the free-throws and throw-ins close to the goal area and by doing so, he/she helps his/her teammates to start the attack; to aid his/her marked fellow players, he/she leaves the goal area so that a teammate can pass the ball to him/her; when he/she is temporarily substituted with a court player, the team creates numerical advantage (7vs6) or compensates for a teammate who was sent off (6vs6 with an empty goal). Although the goalkeeper's duty is primarily in defence, today the speed of the game requires that he/she should also be actively involved in attack. This must also be taken into consideration during practice and goalkeeper training as it is necessary to attain simple attack elements of the court player such as catching and passing while running, dribbling and overarm passes.

The goalkeeper's attacking role starts with his/her offensive attitude when he/she still is in defence. These days the speed of the game demands that the goalkeeper not only accomplishes his/her defence duty well but also that he/she takes an active part in the attack, particularly in its initial stages. The attacking team's interest is to try to bring the ball back into play as quickly as possible when the opponents lose it in order to utilise the opportunity for counter-attacks against a still unsettled defence.

The goalkeeper can encourage this so that while saving, he/she doesn't deflect the ball too far away but rather, he/she should endeavour to keep it in his/her area close to him/her thus to get the ball back as quickly as possible. After gaining possession of the ball, he/she should play it out with a quick short pass (goal-throw) or make a long pass (set off a fast break) to the free teammate in the most advantageous position. In either case, he/she also has to keep an eye on the opponents' goalkeeper who may run out of his/her goal area or may be substituted because sometimes, by appraising this situation early on, the goalkeeper can directly score at the empty goal. In order to execute the quick throw-off without a time delay, it is important that the goalkeeper pass the ball to the teammate at the centreline with an accurate and powerful straight pass.



9.4. Beach handball skills (technique/tactic) and beach handball training at senior handball

Whether beach handball is played at a leisure sport level, or as a performance orientation, there are no reasons of a conflict of doing indoor and beach handball at the same time. Due to the weather conditions, beach handball is mainly played in periods of the year where the demands of indoor handball are reduced. In this way, both disciplines can go hand in hand and could benefit from each other.

On leisure sport level, there are a lot of drop out reasons for senior players: these reasons are mostly the time factor or health problems. Because beach handball is less vulnerable for injury than indoor handball (in particular injuries like the rupture of the cross ligaments occur rarely in beach handball) and because of the tournament structure the needed time-amount is lower than in a whole indoor season, beach handball provides a good opportunity to remain in handball.

On performance sport level, the combination of indoor and beach handball at the same time must be planned. At the end of the indoor season, the transfer of physical abilities in the sand could be done by progressively integrating training on sand. At the end of the beach season, the same should be done in the other direction. Keeping in mind that rest and recreation at the end of a demanding indoor season is necessary and important, beach handball could be used for professional athletes to stay fit, or to get prepared for the next season. The positive preventive effect of playing on sand could have a successful effect in the interplay of indoor and beach handball.

Considering the technical and tactical training, a clear specialisation on individual level is necessary. Every athlete has to find his unique skills and he has to learn how he could implement the skills on an optimum level for the performance of the team. On cooperative level, playing together between two or three players must be found and perfected. Such unique and intriguing interplay of two players could give teams a special character and could be successful over long time periods. At a collective level, teams must find and develop their own philosophy, strategy and character. There is no right or wrong way of playing, the right way is always the way the teams could show their maximum possible performance.

9.5. Workshop leader / coaches' profile

Education level: handball coaching level III / Master Coach / Pro license

The content of the demands:

- the same requirements as level 1-3
- if you are a previous player level 2-3 is sufficient
- · professional activity as a coach
- · supporting athlete development
- · ways of playing and understanding them
- periods of comprehensive training
- · additional courses for nutrition and physical training
- additional handball courses, for ex EHF Master Coach program
- · top performance
- analysing the games with modern technology
- coaches understand that the total control of life affects the overall development of the coach



10. MASTER HANDBALL (AGE 45 — 64 YEARS)

10.1. Physical aspects

STATUS

A smooth transition from developing physical literacy to lifelong physical activity and participation in sport, or from the sport excellence stream to competitive for life, fit for life.

Move from competitive sport to recreational activities such as running, walking, hiking and cycling.

Keep active by continuing to participate in organized and non-organized physical activity.

FOCUS

The contents of the training in this phase are very similar to the stage of mini handball and youth handball. The main focus should be on fun and game.

Additional training could be in mobility work, strength training and aerobic endurance training and injury prevention training.

Strength

Training the muscular hypertrophy and plyometrics to trigger structural processes, specifically to maintain muscles and bone density. Another aspect could be the strength endurance to protect the cardiovascular system.

Endurance

Main goal is to maintain the performance of the cardiovascular system at a high level and also to protect from coronary heart diseases. Especially aerobic endurance sessions could help for better regeneration, better sleep, maintain brain performance, strengthening of the immune system or a better stress reduction (parasympathetic activation) to avoid burn out...

Mobility

Counteracting age-related limitations in mobility through the use of mobility, stretching, full range of motion strength training or methods influencing connective tissues.

10.2. Mental / social aspects

Psychologically, during middle age individuals experience a need to create or nurture things that will outlast them, by having mentees or creating positive changes that will benefit other people.

Giving back to society through raising our children, being productive at work, and becoming involved in community activities and organisations.

Success leads to feelings of usefulness and accomplishment, while failure results in shallow involvement in the world.

By failing to find a way to contribute, we become stagnant and feel unproductive. These individuals may feel disconnected or uninvolved with their community and with society as a whole. Success in this stage will lead to the virtue of care.

Phase for those who participate simply because they get satisfaction from sport or physical activity. They may, from time to time, compete at a recreational level, but that is not their primary purpose. It describes those who engage in non-sporting physical activity.

There are eight essential factors for healthy adulthood and successful aging. The eight factors are interdependent, and each is critical to be fit for life.

- 1. appropriate physical activity
- 2. cognitive function
- 3. psychological well-being
- 4. social connection
- 5. embracing life transitions
- 6. managing chronic conditions
- 7. mindful nutrition
- 8. durability by design



10.3. Beach handball skills (technique/tactic) and beach handball training at master handball

At masters' level, athletes should be able to play beach handball according the official rules. At first sight, no adaptions are necessary because the sand reduces the risk of injuries in moving and falling significantly. Furthermore, physical contact is prohibited, so the risk of injuries due to contact are also reduced.

At a physical level very good preparation due to goal-oriented warm-up on the sand surface sand is suggested to prepare the muscles and ligaments in particular at the lower body segments.

Technical-tactical training can be conducted as in the seniors' handball level. The reduced overall movement speed will reduce the speed of the game, and therefore this will end up naturally in a self-adapted masters' beach handball game.

On a mental and social level, the focus is more on common activities than on winning and competing. However, there is no reason why teams at this age group should not participate in tournaments at a leisure sports level and activities for senior handball. Special "beach handball master tournaments" could be organised in the same way as the tournaments for the younger age categories.

10.4. Small games / playing form

GOALCHA - five-a-side

Playing court size: 260cmx200cm

Goal size: 200x300cm

Ball size: soft Five-a-side Handball

Team size: 5 players on court from each team

Playing time: 8-12 minutes without half time (depends on players)

Competition rules:

- goalkeeper can participate in the offense
- · replacement from side-line
- · game starts from the goal after each score
- · goalkeeper may not attempt to score while standing in the own goal area
- game starts by a throw-off in the centre of the court with two players form each team competing for ball

Restrictions, not allowed to:

· No tackles or hard physical contact

Find more information here: https://goalcha.com/

10.5. Workshop leader / coaches' profile

- good knowledge of body changes with age
- good motivator/leader to keep athletes in our sport after active career is ending -> to keep up the physical condition
- basic handball skills ("normally in this age everybody knows everything")



11. RECREATIONAL / WALKING HANDBALL (+/- 65 YEARS)

11.1. Physical aspects

STATUS

Holding the active lifestyle without injuries (or minimise the problems)/ maintaining the joy and fun of movement and playing handball.

FOCUS

Coordination (with or without a ball) / balance / mobility / fall prevention / strength training / aerobic endurance.

11.2. Mental / social aspects

It is during this time that we contemplate our accomplishments and can develop integrity if we see ourselves as leading a successful life.

Individuals who reflect on their life and regret not achieving their goals will experience feelings of bitterness and despair.

We tend to slow down our productivity and explore life as a retired person.

It is believed that if we see our lives as unproductive, feel a sense of guilt about our past, or feel that we did not accomplish our life goals and that we become dissatisfied with life and develop despair, often leading to depression and hopelessness.

Success in this stage will lead to the virtue of wisdom. Wisdom enables a person to look back on their life with a sense of closure and completeness, and also accept end of life without fear.

Wise people are not characterised by a continuous state of ego integrity, but they experience both ego integrity and despair. Thus, later life is characterised by both integrity and despair as alternating states that need to be balanced.

As people get older, many become more aware and conscious of the risk of injury, especially as bodies and fitness levels change.

The best sports for seniors are those that keep them active, allow them to express their competitive side but are also low impact with low injury risk.

11.3. Handball skills (technique / tactics)

No special handball skills are needed beside basic movements such as catching and throwing. The players walk instead of run.

Any activity in this group is focused on general movement, agility / mobility and of course fun and socialising.

11.4. Beach handball skills (technique/tactics) and beach handball training at recreational handball

The main aim of this age group is staying healthy and spending a joyful time with other people. The preservation of an adequate level of muscular power, endurance and the coordinative abilities will be helpful for staying healthy and could increase the individual wellbeing.

In particular on coordinative level, the balance ability is challenged by moving and playing on sand. A good balance at this age level is a basis to move safe and stable through everyday live and reduces the risk and fear of falling. The risk of falling by participating in handball activities on sand is quite high, but the risk of an injury is quite low due to the soft surface. Falling and standing fosters the general coordinative abilities and the body strength.

Because moving on sand is associated with a high intensity demand, the cardiovascular system is challenged. Short demands followed by phases of rest present a valuable mix to help preserve cardiovascular health.

Similar to the suggestions for indoor handball, a simplification of the game form is recommended. The game form of "Mini Beach Handball" with some modifications could be implemented at this age group:

- Playing just on goals not on points. If someone is able to try a trick shot, this should not be forbidden, but the actions with body rotations or high intense jumps should be avoided.
- Make substitution at the own will. A frequent change between playing time and rest should be ensured for every athlete.
- Use soft and easy to grasp ball material. Everyone participating in the game should be able to handle the ball as easy as possible.
- Simplify the shoot-out situations (like in mini beach handball) or replace it with 6m-penalty competitions.



11.5. Small games / playing form

GOALCHA - five-a-side

Playing court size: 260cmx200cm

Goal size: 200x300cm

Ball size: soft five-a-side handball

Team size: 5 players on court from each team

Playing time: 8-12 minutes without half time (depends on players)

Competition rules:

- goalkeeper can participate in the offense
- replacement from side-line
- game starts from the goal after each score.
- goalkeeper may not attempt to score while standing in the own goal area
- game starts by a throw-off in the centre of the court with two players form each team competing for ball

Restrictions:

• No tackles or hard physical contact

Find more information here: https://goalcha.com/

Walking Handball

No official standings, no results and smaller playing fields.