



RECOMMENDATIONS FOR INTERGENERATIONAL ADAPTED SPORT ACTIVITIES FOR FAMILIES





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Colophon

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Editor: Talja Sušec, Zavod APGA

Authors: Lucia Svata, Patricia Necedova, ACTIVE AU, Leo Smrekar, Lotina kutija, Andreas Andreou, AZO, Vladimir Timot, KOM 18, Lucia Veleva, Courage Foundation, Viktor Sušec, APGA

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PROJECT PARTNERS



COORDINATOR OF THE PROJECT:

Association for active life and education,
Austria
Lucia Svata
www.euactive.org



PROJECT PARTNERS:

Active Zone Outdoor, Cyprus
Andreas Andreou
www.activezoneoutdoor.cy



Courage Foundation, Bulgaria
Lucia Veleva
www.couragefoundation.eu



Club for Youth Empowerment 018, Serbia
Sanja Tošić
www.kom018.org.rs



Lota's box, Croatia
Leo Smrekar
www.lotina-kutija.hr



Physical Activity Promotion Agency, Slovenia
Viktor Sušec
www.zavodapga.si

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INTRODUCTION

This publication “Recommendations for intergenerational adapted sport activities” was developed in the frame of the project “Building Family Bonds through Sports” (project No.:101089863).

Contributing partners: Association for active life and education (Austria), Physical Activity Promotion Agency (Slovenia), Courage Foundation (Bulgaria), Active Zone Outdoor (Cyprus), Lota’s Box (Croatia), Club for Youth Empowerment 018 (Serbia).

The photographs featured in this publication were captured during project activities with explicit permission obtained from the individuals, their parents, or legal representatives.

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BONTS

PROJECT

INTRODUCTION

FAMILY AND SPORT



Source: KOM 018, BONT'S event, 2023

When parents involve their children in sports activities, they not only provide them with an active lifestyle but also build a strong bond that lasts a lifetime.

Family is the fundamental unit of society and plays a crucial role in a child's upbringing and development. Within the family, the parent-child relationship is the most important and intimate one that has a profound impact on a child's personal and social growth. Sports, on the other hand, play a vital role in facilitating physical, emotional, and social learning for children. When parents involve their children in sports activities, they not only provide them with an active lifestyle but also build a strong bond that lasts a lifetime. Sports activities that are directed and supported by parents create a nurturing and loving environment for children to explore and develop their athletic abilities. Parents' encouragement and guidance support children in their sports journey, enabling them to find satisfaction and accomplishment in their athletic pursuits. In addition, sport participation helps children develop skills such as teamwork, discipline, respect for authority, and self-control. As a result, children become confident in their abilities and acquire a positive outlook towards life.

Furthermore, safeguarding in sport is a crucial aspect to consider when involving children in sports activities. Children's safety and well-being should be a top priority when participating in any sports activities. Providing a safe space for children to play sports fosters a sense of trust, security, and confidence within both children and parents. Therefore, building family bonds through sports is a highly beneficial and meaningful activity that can significantly enhance family relationships. When children participate in sports, they learn the importance of support and encouragement from their parents. Sports cultivate a sense of teamwork, a shared purpose, and a common

goal, which reinforces the family unit and creates a collective passion for sports. Ultimately, building family bonds through sports is an excellent way to strengthen familial relationships and provide children with a solid foundation for personal growth, development, and success.

Providing a safe space for children to play sports fosters a sense of trust, security, and confidence within children and parents.



Source: Janja Šetina, Tek po mestnih poteh za zdravje in smeh, 2023

PROJECT BONTS: SPECIFIC AIMS



Source: KOM 018, BONTS event, 2023

Sports are an integral part of modern society, providing not only physical health, but also emotional well-being to millions of people worldwide. Beyond the physical benefits, sports have also proven to be an effective vehicle for fostering social bonds within families. In particular, the BONTS project aims to build family bonds through sports, recognising the importance of creating stronger and more resilient families through healthy physical activities.

The family unit is the foundation of society, and building strong family bonds is crucial for the well-being of both children and parents. Such strong bonds can only be made through meaningful collaborations imbued with mutual respect, trust, and shared values. BONTS project recognises this fundamental importance and has created a framework to encourage and facilitate such interactions. The goal is to promote physical activities as a means of bringing family members together, to

BONTS project aims to build stronger family bonds through sports, promoting healthy physical activity and fostering closer relationships between family members.

allow each member to participate in sports and to foster the development of stronger and more meaningful relationships. The BONTS project, co-funded by Erasmus+ Sport program, seeks to create a network of support and encour-

agement to foster a positive family environment where sports play an essential role in maintaining and nurturing healthy relationships. BONTS project aims to build stronger family bonds through sports, promoting healthy physical activity and nurturing closer relationships among family members. The project seeks to inspire and motivate families to engage in interactive sports programs which will help create a positive and supportive family environment. The following chapters of this report will explore the project in greater detail and examine various activities and programs that have been created to achieve its objectives.



Source: Association for Active Life and Education, local event in Vienna, 2023

RECOMMENDATION ASPIRATIONS

In order to foster the engagement of families in sports and recreational pursuits, while also raising awareness of diverse opportunities for collective physical involvement, the creation of Recommendations for intergenerational adapted sport activities has been proven as a crucial endeavour. The implementation of the Recommendations will empower event organisers and professionals to innovate new adapted activities based on pre-existing sports and games, suitably modified and tailored to accommodate the participation of every family member,

irrespective of their age, aptitude, and physical condition. Comprising a compendium of principles, the proposed guidelines within these Recommendations will be broadly applicable across a spectrum of sports and games, offering valuable insights on how to reconfigure these pursuits to adequately cater to the needs of both the youngest and oldest family members in unison. Furthermore, due consideration will be given to the abilities and skills of all participants, thereby rendering these newly devised activities inclusive and amenable to the entire family unit.

The implementation of Recommendations will empower event organisers and professionals to innovate new adapted activities based on pre-existing sports and games, suitably modified to accommodate the participation of every family member, irrespective of their age, aptitude, and physical condition.

WHOM ARE RECOMMENDATIONS FOR?

The Recommendations serve as a powerful tool that not only benefits youth workers and sport experts, but also extends its reach to a broader audience, positively impacting the field of sport and physical activities for people of diverse backgrounds and abilities.

The Recommendations are designed to offer assistance to youth workers and sport experts, equipping them with practical and beneficial advice and activities that will enhance their skills and professional growth. These guidelines aim to expand their capacities and support their ongoing development in their respective fields. Moreover, this Manual of recommendations goes beyond its impact on youth workers and sport experts. It serves as a valuable resource for any organisation or professionals seeking to create innovative and tailored sport activities that cater to individuals of

all ages, skill levels, and physical abilities. By utilising these recommendations, they can effectively design sports programs that are inclusive, adaptive, and engaging for a wide range of participants. The Recommendations serve as a powerful tool that not only benefits youth workers and sport experts, but also extends its reach towards a broader audience, positively impacting the field of sport and physical activities for people of diverse backgrounds and abilities. The potential for growth, inclusivity, and professional advancement becomes accessible to all those who embrace these guidelines.

HOW TO USE THE RECOMMENDATIONS?

The collection of Recommendations serves as a valuable resource, providing support and guidance to a wide range of professionals such as youth workers, sport experts, event organisers, and others who aim to expand and enhance their skill offerings. These Recommendations are specifically designed to assist in adapting existing sport activities, making them inclusive and accessible to individuals of all ages, abilities, and physical conditions.

The manual contains various tips and detailed instructions, carefully curated from the insights gathered through the BONTS project. These guidelines not only help professionals modify and diversify their current sports programs but also inspire them to create entirely new adapted activities. By following the advice presented in the manual, professionals can confidently design sports initiatives that are inclusive and ca-



Source: Association for Active Life and Education, local event in Vienna, 2023



Source: Association for Active Life and Education, local event in Vienna, 2023

ter diverse populations, ensuring that everyone can participate and benefit from the power of sports. These Recommendations act as a bridge between knowledge and action, empowering professionals to make a positive impact on their communities by fostering inclusiv-

ity, diversity, and equal access to sports. By embracing these guidelines, practitioners can enrich their skill sets and contribute to the promotion of healthier, more inclusive, and fulfilling physical activities for people from all walks of life.

BONTS PROJECT CONSORTIUM

Promoting physical activities as a means of bringing family members together is of utmost importance, especially on a European level where diversity exists within the partners from Austria, Slovenia, Croatia, Bulgaria, Cyprus, and Serbia.

According to recent studies, a sedentary lifestyle is a leading cause of major illnesses, including diabetes, obesity, and cardiovascular disease.

According to recent studies, a sedentary lifestyle is a leading cause of major illnesses, including diabetes, obesity, and cardiovascular disease. By engaging in physical activities, families can benefit from improved physical and mental health, and overall well-being while also having fun bonding experiences. Physical activities encourage socialisation, companionship, and peer

support among family members, leading to better communication and stronger relationships. Initiatives that promote physical activities can bring together families from different cultures, ages, and backgrounds, provide a platform for cultural exchange, and foster collaboration and understanding. Therefore, it is crucial for the partners from Austria, Slovenia, Croatia, Bulgaria, Cyprus, and Serbia to work together towards encouraging and promoting physical activities as a means to bring families together on a European level.

AUSTRIA

Association for Active Life and Education (ACTIVE Austria) is a diverse team of sports enthusiasts, nature lovers, and culture aficionados. With their extensive experience in organising outdoor sports and activities, ACTIVE Austria contributed to Erasmus+ sport projects. Additionally, they boast a broad spectrum of physical and cultural activities, including intercultural events, outdoor sports train-

ing, language classes, eco-friendly courses, and recreation programs for all family members. Whether you're a small child, senior citizen, migrant, or a family, there's something for everyone in their hikes across Vienna, where safety and expertise are always a priority.

BULGARIA

Courage foundation (COURAGE) is dedicated to supporting and expanding opportunities for disadvantaged individuals, such as the unemployed, women, adults, people in difficult social conditions, those with disabilities, and youth. They have a wealth of experience working with diverse target groups and have successfully completed projects focused on elderly individuals. COURAGE can offer expertise in engaging with older family members, organising seminars, training, study visits, cultural and sports activities for vulnerable groups, and facilitating international sports events. Furthermore, COURAGE has extensive knowledge on implementing non-formal education (NFE) activities and has completed over 100 successful Erasmus+ projects. During the dissemination and impact phase of the project, COURAGE's involvement will be crucial. They have a strong partnership with local TV

operators, ensuring a wide reach and dissemination of the project's results to stakeholders and citizens alike.

SLOVENIA

Agency for promotion of physical activity (APGA) is an organisation from Slovenia, specialised for research, development, and applied activities in the field of health promotion and physical activity. APGA uses sports as a tool to promote social inclusion, intercultural and intergenerational dialogue, capacity building, key competencies development, mobility, health, and well-being. APGAs' experienced team has implemented various sport projects and organised trainings, workshops, seminars, and other activities for diverse social groups, including school children, youth, and those with fewer opportunities. APGAs' members have extensive experience in fields such as kinesiology, pedagogy, human resource management, economics, and social science, making their knowledge a valuable asset to any project.

SERBIA

Club for Youth Empowerment 018 (KOM018) specialises in organising and executing various activities such as workshops, trainings, sem-

inars, youth exchanges, lectures, and conferences. They mainly focus on reaching out to children and youth, with a priority on designing international training and sportive events for families with fewer opportunities, including young children. With over 150 international projects under their belt, they have developed a methodology for successful cooperation with multiple project partners. KOM 018 also has strong ties with local institutions and NGOs in the south of Serbia, making it easy for them to promote and disseminate the project's findings. Moreover, they have an extensive network with sport clubs and sport associations, and they will make available their proven methodologies and tools for youth work with sport as a method. KOM 018 has already started working closely with various high schools in the local community, and they plan to engage and involve a large number of young people and families in project activities to promote the project in the local community.

CROATIA

Lota's Box bases its activity on two pillars: lifelong learning and sports, occasionally combining them in order to bring out the best out of both, especially in supporting digital transition in sport organisations

and virtual exchanges as a means of intercultural learning. The organisation actively promotes youth involvement, engagement, and empowerment by encouraging mobility, volunteering, diversity, equality, tolerance, and participation of young people and youth workers. Through the ambassadorship of the European Citizens' Initiative they are stressing the European dimension of their work and promoting participatory democracy.

CYPRUS

Active Zone Outdoor (AZO) is an organisation dedicated to facilitating the enhancement of mental and physical health of young people through outdoor and sport activities, with a particular focus on youth with limited opportunities. AZO's experienced members are experts in a variety of sports such as rock climbing, beach tennis, yoga, sailing, Stand Up Paddle and cycling and will contribute to international sporting events and the collection of good practices in our project handbook. AZO adapts sports activities to ensure inclusivity for all participants, both adults and children with experience and expertise in the adaptation of sport activities for people with visual impairment and other (dis)abilities.

ERASMUS+ SPORT

The Erasmus+ Sport program is an effective tool for developing adapted sport activities for all family members due to its comprehensive and well-structured nature. It is a European Union initiative that aims to contribute to the development of the sport sector by promoting European traditional sports and games, encouraging participation in sport and physical activity, and fostering social inclusion through sport. The program provides opportunities for organisations to collaborate and create innovative projects that benefit people of all ages, genders, and abilities. Moreover, it offers international mobility and lifelong

learning for sport professionals, coaches, and volunteers. The Erasmus Plus Sport program has already supported various projects promoting adapted sports, such as wheelchair basketball, blind football, and inclusive dance. It has proven to be an effective way to enhance the physical and mental well-being of family members with disabilities, while also raising awareness and removing barriers on a societal level. In conclusion, the Erasmus+ Sport program stands as a remarkable example of how sports can be used as a powerful tool for adaptation, inclusion, and development, reaching out to all individuals and families.

The program provides opportunities for organisations to collaborate and create innovative projects that benefit people of all ages, genders, and abilities.



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IMPORTANCE OF EXERCISE AND SPORTS FOR FAMILIES

WHY ARE SPORT AND PHYSICAL ACTIVITIES CRUCIAL?

Physical activities and sport play a vital role in the overall well-being and development of individuals. From early childhood to adulthood, engaging in regular physical activities offers numerous benefits, both physical and mental. From a young age, children are naturally inclined to move and explore their surroundings. Physical activities, such as running, jumping, and playing games, are essential for their growth and development. These early interactions with physical movements lay the foundation for a healthy lifestyle and establish the importance of staying active. Parents and educators play a crucial role in encouraging and facilitating physical activities among

children, creating a positive starting point for a lifelong journey of health and fitness.

Physical activities and sport play a vital role in the overall well-being and development. Parents and educators play a crucial role in encouraging and facilitating physical activities among children.

As individuals progress into adolescence and adulthood, sports and physical activities become even more critical. Regular exercise helps maintain a healthy weight, strengthens bones and muscles, and reduces the risk of chronic diseases such as heart disease, diabetes, and certain types of cancer. Engaging also improves cardiovascular health, enhances lung capacity, and boosts overall physical fitness. These benefits are particularly important in today's sedentary society, where technological advancements and lifestyle changes have led to a decrease in physical activity levels.

Apart from the physical advantages, participating in sports and physical activities fosters social and emotional development. It provides opportunities for individuals to interact with others, learn teamwork, build friendships, and develop crucial life skills such as communication, leadership and problem-solving. Team sports, for instance, teach individuals the value of collaboration and cooperation, promoting a sense of belonging. These social interactions contribute to the formation of a well-rounded personality and promote positive mental health. Furthermore, physical activities and sports act as powerful stress relievers. In today's fast-paced and demanding world, stress has become a prevalent issue, affecting individuals of all ages. Engaging in physical activities releases endorphins, commonly known as the "feel-good" hormones, which elevate mood, reduce anxiety, and alleviate stress. Regular exercise

also promotes better sleep patterns, leading to improved overall well-being and mental health.

Another important point for physical activities and sport is the influence of role models and community support. Inspiring individuals who excel in sports serve as role models for aspiring athletes, motivating them to pursue their passions and achieve their goals. Schools, sports clubs, and community organisations play a crucial role in providing resources, facilities, and guidance to encourage individuals to participate. These support systems create an enabling environment and contribute to the overall development and well-being of individuals.

By recognizing the significance of physical activities and incorporating them into our daily routines, we can unlock the full potential of our physical and mental wellness, leading to a healthier, happier, and more fulfilling life.

Engaging in sports and physical activities not only brings physical benefits, but also nurtures social and emotional growth, teamwork, communication, and stress relief.

PHYSICAL ACTIVITIES AND SPORT FOR FAMILIES

INTRODUCTION

In today's dynamic world, where technology dominates our daily lives and schedules are often packed, finding quality time for families to bond and engage in meaningful activities can be challenging. However, prioritising physical activities and sport as a family can have profound benefits for all members, it promotes physical fitness, emotional well-being, and can create lasting memories. This section delves into the significance of physical activities and sport for families, exploring the advantages they offer and providing practical suggestions for incorporating them into family routines. Besides the positive effect on health and well-being physical activity of all members/generations in a family can profit also in various aspects:

- **individual development:** sport/game can be incorporated in activities where all members dis-

cuss different aspects of life, their goals, and dreams. They can be used to develop and strengthen self-awareness and self-consciousness, positive feelings, and self-image.

- **team development:** goals are to develop and improve cooperation, trust, safety, communication, and positivity in a fun and playful environment which sport can provide.

- **team communication:** this can be perspected through verbal and nonverbal communication that boosts all members' skills to communicate more efficiently and even break barriers of different languages spoken.

- **mindfulness through and in sports:** this aspect brings awareness about and evokes positive emotions, connection with nature through mostly outdoor activities and development of all 5 senses.

PROMOTING PHYSICAL ACTIVITY

Regular physical activity is crucial for maintaining good health and preventing chronic diseases. By engaging in physical activities as a family, everyone can reap the benefits of improved cardiovascular health, increased muscular strength, enhanced flexibility, and better overall physical fitness. Parents serve as role models for their children, and when they prioritise physical activities, it instils healthy habits and encourages the younger generation to lead active lifestyles.

STRENGTHENING FAMILY BONDS

Participating in physical activities and sport together allows families to bond and spend quality time with one another. These shared experiences create lasting memories

Prioritizing physical activities and sports as a family offers profound benefits, promoting physical fitness, emotional well-being, and lasting memories, even in today's world.

and strengthen the emotional connection between family members. Whether it's going for a hike, playing a game of soccer in the park, or taking a bike ride, these activities foster a sense of unity, cooperation, and teamwork within the family.



Source: Lota's Box, National Sport Lab in Zagreb, 2023

DEVELOPING LIFE SKILLS

Engaging in physical activities and sport as a family provides an opportunity for children to learn essential life skills. Team sports, for instance, teach cooperation, communication, and problem-solving, while individual activities like swimming or martial arts promote discipline, self-confidence, and goal-setting. These skills transcend the realm of sports and are applicable to various aspects of life, including academics, relationships, and career development.

ENHANCING MENTAL WELL-BEING

Physical activities have a positive impact on mental health for individuals of all ages, and this holds true for families as well. Engaging in exercise releases endorphins, which elevate mood and reduce stress and anxiety. By participating in physical activities together, families can collectively experience the emotional and psychological benefits, fostering a positive and supportive environment at home. Exploring various aspects of mindfulness can also contribute to the creation and strengthening of family ties, as members of various age groups can participate in them. The methods offered by the Stressless

Physical activities positively impact mental health, benefiting individuals and families.

Education through Sport for Stress Management and Mindfulness and Mindful Coaches European projects can be a good starting point for work on family relationships.

SPORT WITH CHILDREN WITH DISABILITIES

Engaging children with disabilities in sports is a powerful way to promote their physical, emotional, and social development. Adaptive sports offer tailored opportunities for children with various disabilities to participate in activities that accommodate their unique needs. Wheelchair basketball is one such sport, enabling children with mobility challenges to play a fast-paced and exciting game. Adaptive swimming allows children with physical disabilities to enjoy the water and build their strength. Para-athletics provides an inclusive platform for children with diverse impairments



Source: Lota's Box, National Sport Lab in Zagreb, 2023

Adaptive sports empower children with disabilities, fostering fitness, confidence, and inclusivity with vital support.

to showcase their athletic abilities. Goalball, a team sport for visually impaired children, fosters teamwork and communication skills. Participating in these sports not only improves their physical fitness but also boosts their self-esteem and self-confidence. It offers them a chance to experience the joy of teamwork, friendly competition, and personal growth.

The support and camaraderie they find in these inclusive environments help combat feelings of isolation and marginalisation. Moreover, engaging in adaptive sports helps break down barriers and challenges stereotypes about disabilities. It fosters understanding, empathy, and a more inclusive attitude towards people with diverse abilities in society. Parents, teachers, and coaches play crucial roles in encouraging and supporting the involvement of children with disabilities in sports. Creating inclusive programs and accessible facilities is essential to ensure that every child has the opportunity to participate. It is also vital to adapt coaching techniques to cater to individual needs, fostering a pos-

itive and supportive environment. In conclusion, sports offer immense benefits for children with disabilities. They provide avenues for physical activity, personal growth, and social interaction, promoting a more inclusive and accepting society overall. By embracing adaptive sports, we can empower children with disabilities to thrive and reach their full potential.

OVERPASSING LANGUAGE BARRIERS

Sport has a remarkable ability to transcend language barriers and foster communication and understanding among individuals from diverse linguistic backgrounds. When people come together to play sports, the shared activity becomes a universal language that enables them to connect beyond words. On the playing field, the focus shifts from verbal communication to non-verbal cues, body language, and teamwork. Players develop a unique form of communication that relies on mutual understanding and trust. This shared experience creates a sense of camaraderie and breaks down linguistic barriers, as everyone is united by a common goal. In international sports events or multi-cultural teams, play-

Sport unites people beyond words, transcending linguistic barriers through shared experiences and teamwork.

ers often learn basic phrases or sports-related terms in each other's languages, leading to small but meaningful interactions. These exchanges not only enhance communication but also promote cultural exchange and appreciation. Sports also offer a safe space for individuals to interact without the fear of making language mistakes or miscommunications. It encourages them to be more patient, empathetic, and tolerant, as they learn to embrace diversity and respect different ways of expression. Beyond the playing field, spectators from different linguistic backgrounds can come together to support their favourite teams or athletes. Cheering, applause, and emotions expressed through body language create a shared experience, regardless of the languages spoken. Overall, sports provide a platform for people to connect, bond,

and celebrate together, breaking down language barriers and fostering a sense of global community. Through sport, individuals can build relationships that go beyond words, promoting unity and understanding across cultures and languages.

PROMOTING PHYSICAL FITNESS

Promoting physical fitness is essential for maintaining a healthy lifestyle and overall well-being. There are several effective ways to encourage physical fitness:

- **Regular Exercise:** Encourage daily physical activities like walking, jogging, cycling, or swimming. Find activities that suit individual preferences and interests.
- **Family Participation:** Engage in physical activities as a family, such as hiking, playing sports, or taking fitness classes together. It promotes bonding and creates a supportive environment.
- **Set Goals:** Establish achievable fitness goals and track progress. Celebrate milestones to stay motivated.
- **Create a Routine:** Incorporate physical activities into daily routines to make them habitual and easier to maintain.
- **Make it Fun:** Choose enjoyable activities to make fit-

ness feel less like a chore and more like a source of joy.

- **Stay Active Throughout the Day:** Encourage movement by taking breaks, using stairs instead of elevators, and standing instead of sitting for extended periods.
- **Healthy Eating:** Promote a balanced diet that complements physical activities for optimal results.
- **Community Involvement:** Participate in local fitness events, sports clubs, or classes to build a sense of community around physical fitness. European Week of Sports in September can be good starting point in a direction to investigate or join community practices
- By incorporating these strategies, individuals can embrace physical fitness as a lifestyle, leading to improved health and a higher quality of life.



Source: KOM018, Activity with families, 2023

**PHYSICAL ACTIVITIES
AND DEVELOPMENT.
CHARACTERISTICS.
FAMILY PSYCHOLOGY.**

INTRODUCTION

In recent years we see limited physical activity mostly in the late child ages. Nowadays, children lead an increasingly sedentary lifestyles that involve time spent on computers and watching TV. Staying too long in the classroom also compromises the need of children for movement activities. This leads to neglecting the importance of physical activity that is typical for this developmental period.

Limited physical activity leads to different problems with health, including posture problems, being overweight and obese and so on.



Source: Luchya Taskova's personal archive, 2023

Sport has brought camaraderie, unity and happiness to humans and has many benefits for people of different ages.

Studies show that engaging with sports and movement activities have protective factors against somatic illness and behavioral problems.

It is evident that physical activity is related with mental and physical health.

Sport has brought camaraderie, unity and happiness to humans and has many benefits for people of different ages. The contribution it has to the mental and physical development of children could be the greatest outcome.

Early child development includes physical development, cognitive development, social skills and emotional competence.

PRIMITIVE REFLEXES AND CHILD DEVELOPMENTAL MODULES

Primitive reflexes are natural responses that initiate a developmental process that releases a neural circuit for a particular function. They are automatic movement patterns that begin during pregnancy and are fully present at birth in term infants. Primitive reflexes must be integrated and inhibit reflexor responses to allow the development of natural motor action. They are congenital and conditional and should be present in every newborn baby in good health.

The role of primitive reflexes is to support the baby's survival in the womb and in the earliest period

after birth, when the nervous system is not yet sufficiently developed and functionally connected. In addition, they aim to support the baby's movements, so as to improve muscle tone development. Primitive reflexes serve as the basis for the formation of more mature reflexes. During the first year of a child's life, as he grows and develops motor skills, primitive reflexes are integrated and give way to postural reflexes.

Each reflex is associated with one of the sensory systems – hearing, sight, taste, smell, touch, vestibular system and, last but not least, proprioception.

Unintegrated primitive reflexes can disrupt the development and lead to difficulties in children's social life, lead to emotional problems, and negatively affect children's academic abilities. They can negatively affect psychomotor development and cause disturbances in sensory perceptions and cognitive processes.

Unintegrated primitive reflexes can disrupt the development and lead to difficulties in all areas of children's life.

MORO REFLEX

Moro reflex is the only one of primitive reflexes that can be triggered by all the senses. These are head position (vestibular), touch, sight, sound (auditory), smell (olfactory) and movement factors. It has protective function and aids survival in a newborn whose fight/flight mechanisms are too immature to be of any use. A child with a retained Moro reflex will develop hypersensitivity of the sensory system. Hypersensitivity to tactile sensory channels can result in a child being startled by unexpected physical contact, tickling or close physical contact. Visual hypersensitivity can lead to several problems such as visual-perceptual problems. Hypersensitivity of the auditory system can lead to an inability to discriminate sound.

Moro reflex is in relation with the sensory system. A child with a retained Moro reflex will develop hypersensitivity of the sensory system.



Source: Luchya Taskova's personal archive, 2012

Symptoms of retained Moro reflex include:

- Poor coordination (particularly during ball games) – which leads to poor sequencing and memory skills
- Balance problems
- Motion sickness
- Sensitivity to bright lights
- Difficulty reading black print on white paper
- Tires easily under fluorescent lights
- Dislike of loud noises
- Easily distracted
- Allergies and lower immunity
- Dislike of change – child may be clingy or shy

If the Moro reflex is active, a person will be in a constant state of internal stress.

Hugging and rocking an infant can integrate the Reflex or Moro. But it is often reactivated in teenagers and adults. The reasons can be different like trauma or stress.

If the Moro reflex is active, a person will be in a constant state of internal stress and also will exhibit many symptoms. Some of these are general anxiety and fearfulness, difficulty sleeping or settling down to sleep, weakened immune system, problems with digestion, often prone to allergies, frequent headaches. Others are poor emotional regulation, easily angered, emotional outburst, need to control or manipulate situations, lack of confidence, poor self-esteem.

By using rhythmic movement training techniques that imitate the movements of an infant in

development, patients are able to integrate these retained reflexes. These repetitive motions develop the reflexes and gradually help develop the front and visual cortex of the brain.

Exercises for Moro reflex integration:

Duck and Pigeon – this exercise can be done in sitting or walking position. Duck Position: Feet with toes pointing out and arms bent with thumbs pointing in. Pigeon Position: Feet with toes pointing in and arms bent, palms facing upward, with thumbs pointing out. In a sitting position the feet are against the wall. In walking position. This exercise has some difficulties.

Starfish exercise - Lie back on a bean bag or sofa with a pillow under back. Tilt head back, arms up and out, legs wide. While breathing out, to the count of 5 bring arms in and cross, right over left and bring legs in at the same time, right over left. While breathing in, to the count of 5 bring arms back out, bring legs back out. While breathing out, to the count of 5 bring arms in and cross, left over right, bring legs in at the same time, left over right. Repeat the steps.

ORAL-MOTOR REFLEXES. ROOTING, SUCKING AND SMOOTHING REFLEXES

These are true primitive oral-motor reflexes that appear gradually during the 12th week after and should be present in newborn. All be considered as appropriate feeding responses in infants. The purpose is obvious – an innate pattern for searching for food before vision develops. The sucking reflex is essential for coordination and aids in breathing and swallowing.

The combination of breastfeeding, swallowing and breathing and the coordination of this is a complex sensorimotor skill for speech development.

The combination of breastfeeding, swallowing and breathing and the coordination of this is a complex sensorimotor skill for speech development. A poor sucking reflex in infants is an indirect indicator of neurological maturity. It may suggest basal ganglia or brainstem dysfunction. Poor control of the muscles around the mouth can lead to speech and articulation problems.



Source: Luchya Taskova's personal archive, 2015

The snout reflex, known as orbicularis oris reflex or “pout”, is elicited after the examiner gently taps the closed lips near the upper midline lip. The lips should pucker as the muscles contract causing the mouth to look like a snout. This reflex is considered a frontal release sign and is usually inhibited by the frontal lobe. However, if that part of the brain is damaged, its inhibition is not as sufficient, thus showing the reflex. Interestingly, frontal release signs may be present in a patient with disorders such as dementia, metabolic encephalopathies, closed head injuries, and hydrocephalus. There may be retained connections with hand and mouth movement, especially if an unintegrated grasping reflex is also present.

PALMAR GRASPING AND PLANTAR GRASPING REFLEXES

If an object such as a finger is placed in the palm, the fingers close around the object (grip). If the fingers are gently pulled upwards, the grip is strengthened (the traction effect) and the baby appears to be able to support its own weight. Unintegrated Palmar reflex can lead to difficulties with fine motor skills like writing, using a spoon or fork.



Source: www.Momjunction.com

The plantar grasp is elicited by pressing the thumb against the sole of the foot just below the toes. The toes should flex and adduct. In some cases, the infant can be held vertically, and by touching the floor, the toes should again flex and adduct. The meaning of an absence or reduced plantar grasp could suggest spasticity in later development. The plantar reflex is also known as the Babinski reflex. The plantar reflex is performed by applying pressure to the lateral aspect of the plantar surface of the foot.

As a result, the great toe extends, and fanning of the other toes occurs; this motion is known as the Babinski sign and it is standard in infants as the corticospinal tracts have incomplete myelination. Be careful not to start on the ball of the foot as a plantar grasp might be initiated, which will be flexion and adduction of the toes.

SYMMETRIC TONIC NECK REFLEX

STNR appears 6–9 months after birth and integrates into the central nervous system 9–11 months after birth. STNR is in relation with body posture, eye-hand coordination, attention and coordination. The STNR reflex helps your infant

The symmetric tonic neck reflex is commonly referred to as the ‘crawling reflex’.

learn to move the top half and the bottom half of their body independently from each other. The symmetric tonic neck reflex is commonly referred to as the “crawling reflex” because it allows your baby to make the transition from laying down to getting up on their

hands and knees. There are also two movement patterns - flexion and extension. As the infant moves from prone (on belly) to quad (on hands and knees), they will begin to extend their neck - look up, and flex their neck - look down. These movements will then elicit a response in the upper and lower limbs. During neck extension, the arms will straighten while the legs will flex/bend. During neck flexion, the opposite will occur - the arms will flex/bend while the legs will straighten - moving the infant into a somewhat down dog position.

Potential factors for unintegrated primitive reflexes, including the STNR are:

- Stress during pregnancy
- Substance abuse during pregnancy
- Caesarean section birth
- Brain damage during labour
- Premature and low birth weight
- Significant illness during the first year of life
- Insufficient stimulation and tummy positioning
- Lack of free movement time on the floor
- Stressful environment
- Not enough nourishment/in-sufficient weight gain

If a child or an adult has successfully integrated their primitive reflexes, a sudden or chronic bout of trauma, stress or injury can re-activate these reflexes. There are some different exercises and play activities that you can incorporate into your child's daily routine that can help promote the integration of the STNR.

Some yoga poses are an excellent way of integration of the STNR – for example Cat-Cow pose.



Source: www.yogajala.com

ASYMMETRIC TONIC NECK REFLEX

ATNR is intended to help the child pass through the birth canal, and later to develop cross-motion skills and good visual-motor coordination. It is in relation to skills for reading, writing, temporal and spatial orientation. The ATNR manifests when the baby's head is turned to one side. The infant's arm and



Source: Luchya Taskova's personal archive, 2015

leg on the side to which the head is turned will extend and the opposite limbs will flex (curl inward) so that the child appears to be in what has been called a “fencer’s pose”. Some of the symptoms related to an unintegrated ATNR in older children or adults are left / right confusion, challenges crossing midline, poor hand dominance establishment, poor bilateral coordination and others.

TONIC LABYRINTHINE REFLEX

Tonic Labyrinthine Reflex - controls head movements and body posture using major muscle groups. Unintegrated TLR can lead to poor balance and equilibrium problems, disorientation and prob-

lems in restoring emotional and physical balance. Also can lead to some motor problems, low muscle tone, and tiptoe walking. Symptoms of an active TLR reflex are poor balance, fear of heights, low muscle tone, poor posture, problems with coordination, weak neck muscles, tension and neck pain.



Source: Dyslexic Strategies, 2023

The untimely integration of this reflex will lead to problems with body posture, urination, trouble focusing, and problems with short-term memory.

There are two components to this reflex: flexion and extension. Flexion can be observed when a child is lying with stomach to the floor. Head moving down causes the body to assume a flexion pattern: spine rounding and limbs bent. Extension can be observed when a child is lying with its back on the floor. Head tilted back causes the body to react in an extension pattern: causing spine arching and leg extension. The arms may assume a surrender position, meaning hands raised up to the side of the head. This helps a baby straighten out after birth. Excellent exercise for TLR is Baby yoga pose and Supermen pose. The TLR is involved in the simultaneous development of postural reflexes, symmetrical tonic neck reflex, and the Landau reflex to help the infant develop coordination, proper head alignment, and posture.

SPINAL GALANT REFLEX

Spinal galant reflex activates around 18-20 weeks after conception and is usually integrated by 6-7 months after birth. Because of the neurological association with the bladder voiding reflex, children with a retained spinal reflex may have poor control of the pelvic reservoirs. The untimely integration of this reflex will lead to problems with body posture, urination, trouble focusing, and problems with short-term memory.



Source: Dyslexia Strategies, 2023

The Spinal Galant reflex supports the development of the muscles in the lower back, pelvic area and legs. It is an integral part of preparation to help the child develop gross motor coordination. The toddler may have an unbalanced gait and may trip frequently. Signs for retained TLR are unbalanced gait, struggles with running, difficulties for climbing stairs, trips frequently.

When a child or an adult with a retained spinal Galant reflex reaches the age to attend school, he or she may experience great challenges with focus and concentration in general. Tight clothing and even certain textures of material may trigger a reflex response on the back and cause fidgeting and squirming. This increases the child's hypersensitivity to any tactile stimulation. Because of these experiences, the child could have difficulty in concentrating on both verbal and written instructions. Spinal Galant reflex can be integrated using exercise when the kid is lying on back and moving her limbs in a "snow angel" shape, until her hands meet at the top of her head and her feet come together.



Source: Luchya Taskova's personal archive, 2021

LANDAU REFLEX

At around 4 months old, infants can lift their head while lying on their tummy and raise their legs along with their chest. The Landau reflex should be fully integrated around the age of 3. The abilities develop gross motor skills like cooperation and coordination between the top and the bottom and front and back to the body posture. Sure, the indication for nonintegrated Landau reflex is low muscle tone, especially in the neck and back. Oftentimes, this can extend even to depression in adults, as the Landau reflex is associated with body posture and linked to positive emotions such as joy and happiness. By moving the body through physical exercise at the stage of development that has been missed, the brain is encouraged to develop the connections that should be formed in early childhood. This results in the release and replacement of primitive reflexes with high-level reflexes. Brain rewiring shows great promise for treating even ADHD. Physical activity has a major role for the integration of primitive reflexes and improves child development entirely, because primitive reflexes are closely related with cognitive, emotional, learning and social skills.

COGNITIVE DEVELOPMENT

The children grow physically during early childhood and they also grow mentally by observing and interacting with the world around them. In a fast developing and competitive world cognitive skill from an early childhood is very crucial. Cognitive development provides children with the means of paying attention and thinking about the world around them. It's the development of knowledge, skills, solving problems and dispositions, helping children to think about and understand the environment. Cognitive development affects information processing, intelligence, reasoning, language development, and memory. Children should be able to improve their ability to focus, remember information, and develop critical thinking as they age. Cognitive skills allow children to understand the relationships between ideas, to grasp the process of cause and effects and to improve their analytical skills. The Swiss psychologist Jean Piaget describes 4 stages of cognitive

development in childhood ages:

1. Sensorimotor (from birth to 2 age) - In this period, intelligence is demonstrated through motor activity without using symbols. Knowledge of the world is limited but develops because it is based on physical interactions and experiences. Children acquire object permanence (memory) at around seven months of age. Physical development (mobility) allows the child to begin developing new intellectual abilities. At the end of this stage, some symbolic (language) abilities are developed.
2. Preoperational stage (ages 2-7) – Children of this age have serious difficulties seeing the world from a different point. Self-centred thinking prevails. In this period, intelligence is demonstrated through the use of symbols, language matures, and memory and imagination develop, but thinking is done in an illogically irreversible way. Preoperational children do not easily understand how things can change from one form to another.



Source: Pexels, 2023

Children who engaged in physical activity demonstrated better executive functions in terms of inhibition and better planning abilities than children who did not engage in any physical activity.

3. Concrete operational stage (ages 7-11) – developing operational thinking. Self-centred thinking is reduced. Children are able to create hypotheses and can predict what the possible consequences of a certain action will be without having to perform it.

4. Formal operational stage (11-15) - At this stage intelligence is demonstrated through the logical use of symbols, associated with abstract concepts. At the beginning of the period there is a return to self-centred thought. Children who participate in physical activities improve their ability to focus and concentrate. In addition, their attention span is also developed. Aerobic exercises improve the selective attention of children. It is proven that children who engage in physical activity demonstrate better inhibition and planning abilities than children who are not physically active. Physical activities improve brain development. Children who are more fit have greater basal ganglia and hippocampus capacities, which are associated with cognitive control and memory.

SOCIAL AND EMOTIONAL DEVELOPMENT

Social and emotional development prepare kids for healthier interactions in all life aspects. These skills are a vital part for social functioning. Helping children develop these important skills requires a different set of strategies at each stage of development. Younger children are self-centred by nature and through games they learn skills that

Children's social-emotional development influences all other areas of development.

they use in their whole life. Social interaction is closely related to emotional development in early childhood. Not only can a child's emotional development be hindered by a lack of social contact, the physical growth of their brain can also be affected. Lack of social contacts leads to reduced growth of the left hemisphere of

the brain, which can lead to an increased risk of anxiety and depression in children. In addition, they may exhibit increased sensitivity in the limbic system, which can lead to anxiety disorders, and reduced growth of the hippocampus, which can contribute to learning and memory impairment. Children acquire their first social and emotional interactions in family environment. After, in their preschool years when they start kindergarten, they learn how to interact with others. The kindergarten allows kids to expand their skills for empathy communication with others. As the children grow up, they learn how to recognize their own and other people's emotions. They also acquire emotional self-regulation skills. In their school years children start to understand better what the emotions are and be able to discuss how they feel. Children's social-emotional development influences all other areas of development: Cognitive, mo-

tor, and language development are all greatly affected by how a child feels about herself and how she is able to express ideas and emotions. An attachment relationship is an enduring one that develops during the first few years of the child's life. It is built upon repeated interactions between the infant and the primary caregiver. These interactions mainly involve attempts by

the infant to achieve physical and emotional closeness and the caregiver's responses to these attempts. Doing sport activities together can be a great way to achieve this goal. Play is also an important part of emotional development for children. Through play, children can express their feelings and learn to cope with emotions such as sadness, anger, and fear.

WHY IS SPORT IMPORTANT FOR CHILDREN?

Mobile games reflect the objective need of society to develop the physical, motor and functional abilities of adolescents.

The physical development of the child as a natural process takes place by virtue of objective biological factors. The effect of natural objective regularities on physical development is manifested depending on the exogenous factors of life and motor activity of the child. Mobile games are the most

ancient component of society's physical culture. They reflect the objective need of society to develop the physical, motor and functional abilities of adolescents with a view to realising general physical training, improving motility and forming motor habits. They help to manage the child's physical development as an integral part of the multifaceted development and realisation of the personality. Through them, the child's organism is gradually involved in active motor activity and satisfies its natural needs for movement, functioning and physical development. The sport activities strengthen the

locomotor apparatus, improves the activity of all organs and systems. Early mobile games develop a wide range of gross motor, fine motor and sensorimotor integration skills such as coordination, balance, visual-motor coordination and much more. The mobile games are a great prevention of problems with primitive reflexes and they are a way for its integration if there exist some delay with the integration. Positive emotions during sport activity are another feature of them.

The mobile games are a great prevention of problems with primitive reflexes.

Emotions are much more pronounced and spontaneous. Participating in sports activities is important for children as it reduces stress, improves mood and improves sleep quality. Sports build a strong bone structure and muscles and reduce the risk of obesity. It also helps children with socialisation and improves teamwork skills. Games are not only fun, they help to reduce stress. In games children learn to manage their time. All

these skills help to better adapt to the role that the child will take on later as an adult and build skills and resilience to deal in difficult situations personally and professionally. The team games develop the sense that the kid is a part of a team and also leader skills. Having a wide variety of play, from standalone game to small or large group play, from passive to more active games, provides leadership and consistency skills and helps each child determine their place in the team or in the group. Sports discipline children and develop a sense of dedication. Playing in this way gives a sense of value and belonging. Games teach patience and make it easier for children to bear defeats, because they are not always winners. The most important things that any child can acquire on the path to adulthood are autonomy and self-actualization. The sport provides this opportunity. The swinging supports the child's development of a sense of balance and teaches the child where his body is in space. The swinging also helps the brain learn to make sense of speed and direction. Climbing also helps for awareness of direction. The games with a ball develop motor coordination skills and also analytic thinking.



Source: Neliana Valcheva's personal archive, Bonts event, 2023

SUMMARY

Participating in sports or regular physical activity provides both direct and indirect benefits. Moving and sports games are a form of organising the life of children of preschool and school age. Along with this, they are actively used in educational and therapeutic work as a method, means and form of training and therapy. The essential characteristic of mo-

bile and sports games is primarily their joint nature. With them, children usually play in groups or pairs united by common interests. Thus, in the process of the game, it is possible for them to enter into certain relationships with the partners imposed by the nature of the game. This is a prerequisite for mastering socially significant skills and for forming valuable personal qualities.

DIDACTIC AND METHODOLOGY

INTRODUCTION

Movement is a basic human need. Regular and sufficient exercise brings a number of benefits to the individual throughout all age periods, among other things it protects and strengthens human health, both physical and mental.

Engaging in sport activities as a family offers a great opportunity to all family members, from children to parents and grandparents, to cultivate physical fitness and promote health and well-being. It further facilitates the early establishment of a culture of active lifestyle giving the opportunity to children to continue physical activity as they grow up. However, it should also

be highlighted that family sport activities can form a powerful vehicle for the acquisition and/or enhancement of essential skills and competences needed for daily life which extend beyond physical exercise, such as teamwork, communication, discipline, positive role modelling, respect and fairness.

At a glance, the overarching goal of adaptive family activities is to create an environment which will foster family bonding and generate beautiful and lasting memories for the family members participating. As this manual is intended to be used as a guiding tool by individuals with or without any prior knowledge, expertise and experience in adaptive family sport activities (e.g. parents, youth workers, grandparents), in this section we will explore some methodological approaches and parameters which should be taken into consideration in order to enhance the family experience, ensure inclusivity and equality as well as boost enjoyment for the entire family, taking into consideration the fact that “children are not the mini - adults”.

SOME KEY CHARACTERISTICS OF A CHILD IN MOTION:

- A growing child has a disproportionate body, poor coordination and aneconomic movements. Anaerobic metabolism is poorly developed and when it is overworked, he does not “feel” pain like an adult, because the muscle does not produce enough lactate. The breakdown of fats is worse and they use up energy faster. Because of poor anaerobic capacity, it also has a low tolerance for exercise where speed and strength are required, such as sprint.
- Anaerobic, intense activities are very exhausting for children. Thermoregulation is also poorly developed, which means that they can quickly overheat and dehydrate.
- A child can develop aerobic capacity with medium-intensity and continuous exercise. The emphasis should be on the development of various motor skills, coordination, technique, and less on intensity.



Source: Vanja Zallatel, Vrtec pri OŠ Gračišče, 2016

MOVEMENT CHARACTERISTICS OF CHILDREN

With appropriate content, we influence the development of motor skills:

- Speed

The ability to move the whole body quickly through space or move the limbs quickly in order to catch or throw (e.g. a sports equipment). Fast execution of running, crawling, climbing, and various throws, strikes, blocks; Games to stimulate the development of speed are running on a slope, relay runs, rhythmic jumps.

- Range of motion

The anatomical range of motion in a joint or chain of joints. We develop it with various dynamic exercises, exercises with swings and stretching exercises. It can only develop to a lesser extent or can only be maintained by achieving large amplitudes of movements in: crawling, crawling and some forms of climbing and by performing

stretching exercises.

- Coordination

it is encouraged by natural forms of movement, different polygons and overcoming obstacles, different activities performed in rhythms, use of aids, activity with both limbs at the same time. coordination - by performing complex and unusual movement tasks.

- Balance

The ability to get into or maintain a position without losing control or falling. Movements on a reduced support surface (walking, running, crawling, pulling, pushing, carrying), walking on a line, walking on a rope, standing on one leg, standing with eyes closed...

- Strength

The ability to produce force to overcome loads - own weight or the weight of objects we manip-

ulate. We develop it with natural forms of movement and games where we include as many large muscle groups as possible, with all forms of elementary and compound movements and their combinations, with greater loads on the trainees through the use of weights.

- Endurance

The ability of an individual to overcome the load for a long time. We



Source: Canva, 2023

develop it by running with intermediate walking, faster walking, running games.

- Accuracy

The ability to lead or direct an object to the goal and at the same time the ability to repeatedly successfully perform a more complex movement task. We encourage it with tasks suitable for the age and abilities of the child and gradually make the task more difficult (throwing a ball at a target...). Precision is trained through precise execution: running, crawling, jumping, falling or in manipulations of hitting the target - throws, catches, hits, blocks.

- Agility

The ability to effectively change body position and combine balance, coordination, speed, strength and endurance to integrate individual movement skills.

In early childhood, speed and coordination develop intensively, while balance, strength, mobility and endurance develop more slowly (Malina et al., 2014; Gallahue and Ozmun, 2002; Thomas and French, 1985).



Source: Vanja Zallatel, Vrtec pri OŠ Gračišče, 2016

DIFFERENT TYPES OF MOTOR SKILLS

Movement skills are the foundation of a wide range of different locomotor skills, object manipulation skills and body stabilization and control skills.

Stabilization skills include both maintaining balance, e.g. after landing as maintaining balance, e.g. in a certain position.

- Locomotor skills involve different movements of the body in different directions such as walking, running, dodging, jumping, hopping, skipping, crawling and crawling.
- Stabilization skills involve balancing the body in place in static conditions, or during movement, in dynamic conditions.
- Object manipulation skills involve manipulating and controlling objects with the hand, foot or other object, such as a racket. Manipulations include throwing, catching, hitting with hands, feet or objects.
- Skills on moving objects (cycling, skateboarding, etc.).

PHYSICAL AND MOTOR DEVELOPMENTAL CHARACTERISTICS

EARLY CHILDHOOD (2-6 YEARS OLD)

1. Boys and girls measure from 83.8 to 119.4 cm and weigh from 11.3 to 24 kg.
2. Perceptual-motor abilities develop rapidly, but there is often confusion in body, spatial, temporal and directional perception.
3. Good urine and stool control is mostly established by the end of this period, but “accidents” can still happen.
4. During this period, children rapidly develop fundamental (basic) movement skills in the form of various movement skills (locomotion, manipulation, compound movements). Bilateral (two-sided or complex) movements, such as skipping, hopping, galloping, can still present more problems than unilateral (one-sided) movements.
5. Children are active, energetic and would often rather run than walk. However, they often urgently need intermediate rests (cyclical repetition of selected movement tasks is important)!
6. Motor skills are developed to the extent that children begin to learn how to dress themselves independently while they need help in tightening or tying individual parts of clothing or footwear.
7. Body structure is remarkably similar between boys and girls. A detailed examination of boys and girls revealed that there were no visible structural differences between them.
8. Fine motor skills are not fully developed, while gross motor skills develop quickly.
9. The eyes are usually not yet ready for long-term near work due to far-sightedness!
10. The functioning of the body and its development become coordinated. The state of physiological homeostasis remains well established.

LATER CHILDHOOD (6-10 YEARS OLD)

1. Boys and girls measure from 111.8 to 152.4 cm and weigh from 20 to 40.8 kg.
2. Growth is slow, especially between the ages of 8 and 10. Body height and weight increase steady and slow compared to the pre-school period.
3. Large muscles develop visibly more than small muscles.
4. Usually, girls are more psychologically developed and lead by a year. By the end of this period, different interests also begin to show.
5. The “leading” hand is expressed, i.e. 85% right and 15% left, or vice versa.
6. At the beginning of this period, reaction time is slow, which causes problems with eye-hand and eye-foot coordination (fine motor skills).
7. Children are full of energy, but have poor physical performance and tire quickly.
8. Visual, perceptual mechanisms are fully developed by the end of this period.
9. Children are often farsighted, so they are not yet ready for long-term close work (work from a short distance).
10. Most basic motor skills have the potential to be well developed at the beginning of this period.
11. Basic movement skills become essential for successful play and participation in movement/sports games and sports.
12. Activities involving the connection between eyes and limbs (manipulation) develop slowly. Skills like hitting the ball with a racket can take a lot of time to develop.
13. Transition from refined elementary movement skills to the development of transitional movement skills, which are an integral part of didactic movement games and techniques and tactics of various sports.



Source: Canva, 2023

FORMS OF SPORT ACTIVITIES

MODERATE EXERCISE / SPORTS ACTIVITY

Activates between 40% and 60% max. aerobic capacity (VO₂max). We breathe a little faster, have a higher heart rate and feel a slight warmth, we must not be out of breath and sweat a lot.

Examples of moderate-intensity form of sports activity:

- hiking
- surfing
- skateboarding
- skiing
- cycling
- walking to kindergarten/school
- swimming
- walking and fast walking
- roller skating
- gardening
- elementary games
- gaming

INTENSIVE EXERCISE / SPORTS ACTIVITY

We breathe intensively, have an elevated heart rate and sweat. We are not or we are slightly out of breath. In this case, there is a continuous, coherent contraction of large muscles, which activate more than 60% of the max. aerobic capacity (VO₂max).

Examples of high-intensity forms of sports activity:

- Active movement games that include running and chasing (i.e. elementary running games)
- Active cycling and cycling on more demanding surfaces
- Jumping the seesaw in the form of various elementary running and elementary group games
- Martial arts: judo, karate, ...
- Running on uneven surfaces
- Sports such as ice or field hockey, ball games, swimming, tennis, skiing.

- Gymnastics
- Weight training
- Heavy household and housework



Source: Canva, 2023

Examples for muscle strengthening:

- Movement games that include crawling or crawling (i.e. elementary group games)
- Climbing frames, ropes, poles,...
- Endurance movement tasks with own body weight
- Sit-ups (recommended in the form of an elementary movement game)
- Gymnastics

Examples for bone strengthening:

- Various movement games that include jumps and bounces (i.e. elementary running and elementary group games)
- Jumping, galloping, hopping (on uneven surfaces and in the form of elementary group games)
- Jumping the seesaw in the form of various elemental running and elemental group games
- Sports such as gymnastics, basketball, volleyball, tennis, ...



Source: Canva, 2023

FAMILY AND SPORT ACTIVITY WITH PRESCHOOL CHILDREN

Just a daily walk with the children is not enough. Children and adolescents must be physically active at least 60 minutes a day. During high-intensity activity, the individual becomes short of breath and sweats, and the body's metabolism goes to a level six times higher than at rest.

Daily physical activity in children can be encouraged by offering to play ball games with them. Passing, catching, kicking are the skills that

a child develops most in the pre-school period.

Children can be taken to playgrounds, where they practise climbing, swinging, spinning, and thus develop a wide variety of skills. If the children are old enough, we can choose such playgrounds that allow adults to exercise (e.g. outdoor fitness) so that we can use the time on the playground ourselves. We can take care of balance games and coordination when we go for



Source: Canva, 2023

a walk. We encourage children to sometimes walk on a stone wall and catch their balance, climb a tree, jump over stones over a stream, roll down a hill, walk a line, jump from different heights.

Hiking with children is the best teacher for learning perseverance, effort and enjoyment of one's achievements. Mountain excursions are suitable for all age groups of children, we just have to always choose the destinations in such

a way that it is not too strenuous, but still just enough of a challenge that we can be happy about the achieved goal.

During the rainy season, we can make a polygon for crawling forwards and backwards in the living room with the tools we have at home. If the children are not particularly fond of sports, we can encourage them to move with dancing or activities they like.



Source: Canva, 2023

FAMILY AND SPORT ACTIVITY WITH ELEMENTARY SCHOOL CHILDREN

During the year, many elementary school students attend sports activities. Therefore, in the summer it is good that he does not stop his activity and focuses on another sport, in order to develop muscle groups that he may not have used during regular training. In the summer, you can propose a wide variety of camps, activities or meetings to elementary school students, which also include sports training. He may be able to experience sports at such workshops that he may not be able to do with you (e.g. horse riding, kayaking, archery).

Aerobic physical activity can also be provided by jumping over a swing, cycling, running, intense



Source: Canva, 2023

dancing, swimming. In the afternoon, we can go together with the children to natural swimming pools, adrenaline or adventure parks, visit nature trails or go cycling.



Source: Canva, 2023

During the colder periods of the day, primary school children can hang out on the nearby playground playing basketball, football, volleyball or other sports. Thus, through sports, they also strengthen social skills. Children will surely like it if you yourself introduce them to the games you used to play. Let us remind you of “Land stealing” game, “Simon says” and gumtwist.

FAMILY AND SPORT ACTIVITY WITH TEENAGERS

For teenagers, sports in the family can be taken as a team-building opportunity. Visiting the mountains, jogging, volleyball and similar sports can quickly open up topics that cannot be coaxed out of a teenager within four walls.

You can also invite your teenager's friends on a trip to the mountains. This will make it easier for them to

go to the mountains, and you will be able to get to know your growing child in a different light.

Make sure the sports you invite your teenager to are attractive and interesting enough to keep them from getting bored. Instead of buying him a new smartphone, buy him a ping pong table, rib chair or roller skates.



Source: Canva, 2023

COMPETITIVE AS EDUCA- TIONAL SPORT ACTIVITIES

There is a great amount of research investigating the positive and negative aspects of competitive sports for children. While competition in sports can be a determinant factor leading to excessive pressure, performance anxiety and bullying among children (Bean et al. 2014), the development of self-esteem,

Development of self-esteem, learning to cope with pressure and failure as well as mastering a sense of achievement are among the positive aspects of competitive sports identified in the literature.

learning to cope with pressure and failure as well as mastering a sense of achievement are among the positive aspects of competitive sports identified in the literature (Eime, 2013). Therefore, the engagement of the whole family in a sport which has a competitive character, in the sense that the members will compete either as teams or as individuals against each other in order to determine the winner, should prioritise the positive aspects of the sport and eliminate the associated negative dimensions. Shifting the emphasis from winning to participation is a key element to help children understand that the goal of the activity is not ultimately to be the winner but to have fun while acquiring new skills, competences and knowledge. In addition, competitive sports can also be enriched with educational elements appropriate for the age groups of the participants. For example, a set of distinctive educational questions addressing children and adults (i.e. parents, grandparents) can be embedded in a treasure hunt activity giving the opportunity to the contestants to test, acquire and improve their knowledge while participating in a physical activity.

ADAPTATIONS TO KNOWN ABILITIES/DISABILITIES

The goal of the adaptive sports activities for families is to avoid stigmatising individual characteristics, such as gender, health, skills and age. In order to achieve that, the physical abilities of the participants should be identified as early as possible. This way, all members can

participate and succeed. Therefore, before implementing the activity, consider whether the activity can be performed by all family members and if not, identify parameters which could be adapted for the benefit of each individual (e.g. rules, equipment, duration).



Source: Canva, 2023

RULES

Acknowledging that individuals of different ages have a diverse range of physical and mental abilities as well, modifying the rules of the activity can be a helpful mechanism to ensure that everyone will participate and enjoy the activity. To this respect, the rules of the existing activity should be identified at the beginning and modifications to the rules should be included and be applied either for the whole

Modifying the rules of the activity can be a helpful mechanism to ensure that everyone will participate and enjoy the activity.

activity or for different age groups in order for the activity to become interesting and not boring for any of the participants. Once the rules have been established, they should be communicated and explained to the participants. Modifications can be considered for the following elements:

Time:

In sport activities in which players have time constraints to perform an action (e.g. basketball), different time rules could apply to children and grandparents as opposed to rules applicable for parents.

Scoring system:

A different scoring system to assess performance occurs in various sports, ranging from net sports such as football and basketball and racket sports such as tennis and volleyball. In order to foster inclusion and active participation among all members in the activity, consider introducing different scoring systems for different age groups. For example, while in a tennis game the player loses a point if the ball bounces twice in his/her court, this rule can be modified in an adaptive family tennis activity and allow the child to hit the ball even if the ball has bounced twice in the court. In addition, modified rules can be applied for all members in team sports, such as volleyball, in which multiple attempts can be allowed during the activity. For instance, more hits can be performed by each player or by the team before the ball passes the net in volleyball. Finally, in order to eliminate the competitive nature of the activity,

the scoring system can be entirely removed.

Environment:

Consider modifying the size of the playing area to adjust to the abilities and physical condition of the participants. For example, you could decrease the size of the football or tennis field according to the number of players and their condition in order to extend the duration of the game and eliminate risks of fatigue by children or elderly. Also, regarding net sports, such as beach tennis, volleyball and basketball, consider reducing the net height to provide an equal and inclusive opportunity for children to play and enjoy.

Consider
modifying the
size of the playing
area to adjust to
the abilities and
physical
condition of the
participants.

The appropriateness of equipment for children is mandatory to ensure the success of the learning activity.

Equipment:

An important factor to consider in the design and implementation of family sport activities is the appropriateness of equipment for children. For instance, a soccer and a basket ball might be too hard for children while a tennis racket is too heavy for them to lift and play. Using equipment which is not adjusted to the physical abilities of the children will lead to unsuccessful results as the children might be unwilling to play adding to the increased risk and injury factor. As a result, consider replacing standard equipment with alternative options as for example, low air pressure balls, lighter rackets, etc.

* These rules should be reviewed during the actual implementation of the activity and modifications should be considered to reinforce active participation of the members.

SAFETY

Sport activities and safety go hand by hand and ensuring that the designed family oriented activities are aligned with some basic safety conditions is mandatory. To this respect, the follow steps should be considered during the design and implementation of the activities with the whole family:

Appropriate activities:

Identify activities which are suitable for all family members regardless of their age, physical abilities and competences. Activities with high risk should be avoided;

Risk factor:

During the design of the activities, a risk assessment activity should be undertaken in order to identify, on the one hand, potential risks and, on the other hand, mitigation measures to avoid or eliminate them. In addition, potential risks should be classified in terms of likelihood and severity;

Equipment: The equipment to be used in the activity should be of good quality and condition and appropriate for all family members

according to their age and subsequent body structure and size;

Rules and boundaries:

The rules of the sport activity as well as core principles and guidelines regarding proper behaviour during the implementation of the activity should be communicated and discussed prior to the commencement of the activity in order to ensure that all participants have clearly understood what is expected;

Warm-up and stretch:

Regardless of the physical intensity of the activity, the participants should be engaged in a warm-up and stretching session in order to get their bodies ready for the activity allowing their body temperature to increase, their brain to engage with the body and thus preventing any injury;

Listen to your body:

Acknowledging the different condition of physical activity for each of the diverse family member, the participants should be encouraged to pay attention at their body during the implementation of the activity and take a break or stop playing if they feel tired, fatigued or injured;

EVALUATION

The activity should be regularly evaluated in terms of its effectiveness, adaptability, engagement and success either through a non-formal peer or self evaluation session after the completion of the activity or by simply observing the participants' reactions during its implementation. Collected feedback should be respected and considered for the improvement of the activity.



Source: Vanja Zallatel, 2016



Source: Canva, 2023

RECOMMENDATIONS FOR SUCCESSFUL SPORT ACTIVITY

Organise targeted activities according to family goals.

Create a positive and supportive environment for developing physical performance and movement skills.

Make the activity fun and provide opportunities for children to play.

Children will be active if they have an interest and motivation to do so. Therefore, when choosing an activity, it is necessary to take into account both the level of their (movement, mental and social) abilities and skills.

Provide opportunities for unstructured play, so that children

Physical activity
and sport should be
the value of every
family.

can learn to anticipate situations during movement and react to them with the widest possible range of movement responses - this means greater creativity, and thus also greater safety and enjoyment in movement.

Children learn and develop different skills in different ways and at different paces according to their age and experience.

Learning new skills will be easier if it is progressive. From simpler to more complex, from easier to harder.

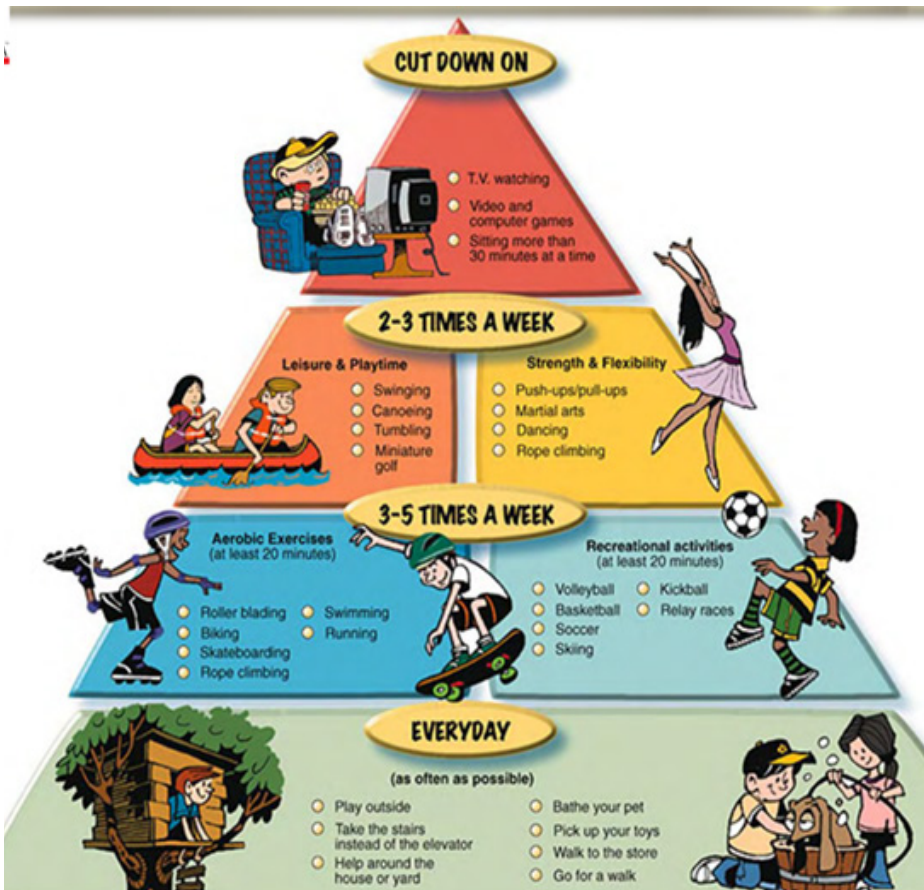
Provide a variety of activities in a variety of environments.



Source: Canva, 2023

MOVEMENT PYRAMID

The habits raised in childhood will accompany him even in adulthood. We encourage the child to move so that this becomes part of his everyday life. Let's start gradually by increasing the time devoted to moderate physical activity and at the same time reducing the time the child spends inactively watching different screens.



Source: Barbara Konda, Fit International, 2023

GUIDELINES FOR PHYSICAL ACTIVITY

The World Health Organization (WHO) recommends the following guidelines for physical activity in children and adolescents:

On average, children and adolescents should be physically active for at least 60 minutes every day, mostly aerobically, at a moderate to high intensity, which means that children pant, feel the heat in their body, or sweat to get their heart rate up.

High-intensity aerobic and muscle-skeletal strengthening activities should be included at least

three times per week. It is recommended to perform a variety of movement activities, which include exercises that affect muscle strength, mobility and bone health.

Children and adolescents should limit the amount of sitting, and especially the free time they spend in front of the screens of electronic devices.

Physical activity should consist of 50% aerobic activities, 25% muscle strengthening exercises and 25% mobility exercises

CHILDREN AND ADOLESCENTS WHO guidelines on physical activity and sedentary behaviour

At least 60 minutes a day
moderate- to vigorous-intensity physical activity across the week; most of this physical activity should be aerobic.

On at least 3 days a week
vigorous-intensity aerobic activities, as well as those that strengthen muscle and bone should be incorporated.

LIMIT
the amount of time spent being sedentary, particularly recreational screen time.

Source: <https://www.who.int/europe/publications/i/item/9789240014886#:~:text=For%20health%20and%20wellbeing%2C%20WHO,All%20physical%20activity%20counts.>

CONCLUSION

In conclusion, the Recommendations for intergenerational adapted sport activities presented in this handbook are an essential tool for promoting physical activity, inclusivity, and family bonding. The guidelines provide practical and innovative ideas for adapting existing sports and games to accommodate every family member, regardless of their age, aptitude, and physical condition.

By implementing these recommendations, event organisers and professionals can create meaningful collaborations that offer mutual respect, trust, and shared values, fostering the development of stronger and more meaningful relationships among family members. Youth workers and sport experts will benefit from the practical advice and activities included in the recommendations, expanding their capacities and supporting their professional growth.

Physical activity and sports play a crucial role in the overall well-being and development of individuals, particularly children. We must also acknowledge the influence of role models and community support in inspiring individuals to pursue their passions and achieve their goals in sports. The joint na-

ture of mobile and sports games presents opportunities for children and adolescents to enter into certain relationships with the partners imposed by the nature of the game, which is a prerequisite for mastering socially significant skills and forming valuable personal qualities.

With this handbook, we hope to inspire and guide everyone interested in promoting physical activity, inclusivity, and family bonding by providing practical strategies that can be applied in various contexts. Our collective efforts towards creating more intergenerational adapted sport activities will lead to a healthier, more active, and more connected society.



BUILDING FAMILY BONDS
THROUGH SPORTS

