AHOS PROJECT

Active and Healthy Olympic Seniors

A MODEL FOR ENGAGING FORMER ELITE ATHLETES IN REGULAR PHYSICAL ACTIVITY

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A MODEL FOR ENGAGING FORMER ELITE ATHLETES IN REGULAR PHYSICAL ACTIVITY

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INTRODUCTION

Maintaining adequate physical activity at least at the recommended level (at least 150 minutes a week of moderate-intensity or 75 minutes a week of vigorous intensity physical activity) is not something that elite athletes can be expected to do easily after the end of their competitive sports careers. Continuing regular physical activity after retirement from sport can be a real challenge for many elite athletes. For a long time, physical activity was part of their daily routine, but this is easily interrupted when they retire. They had access to sports facilities and equipment, a training team, and professional staff, but with the end of their competitive career, all that is gone.

The transition process after retirement from elite sport is well supported but limited to education and integration into professional life. However, activities that support the transition from high intensity training to lower intensity physical activity or encourage regular sport activity in post-sport life are very rare.

It is very important that elite athletes maintain an adequate level of regular physical activity, as they have been extremely physically active for much of their lives and could be even more adversely affected by a transition to inactivity.

Andrea Massi, the famous alpine-ski coach, warned that Tina Maze will need a physical program after the end of her sports career: "If you leave a person, you used to push hard 5 hours per day before, laying on a couch, he/she will get sick. Both physically and mentally." (Slovenske novice, 2015).

To support the maintenance of personal well-being of former elite athletes and an effective transition to a new post-sport career, activities to continue physical activity should be included in the adaptation to retirement from sport.

A model to encourage former elite athletes to engage in regular physical activity is a tool that individuals and sports organisations can use to help encourage former athletes to stay in sport in new roles after their elite sports career is over and to continue to maintain regular physical activity as a cornerstone of good health and an integral part of a healthy lifestyle.

The model and recommendations presented here are based on the research results of the Active and Healthy Olympic and Paralympic Seniors project (AHOS). The study involved elite athletes after their competitive career, mostly aged over 50 years, from Slovenia, North Macedonia, and Poland.

DESCRIPTION OF THE PROJECT "ACTIVE AND HEALTHY OLYMPIAN AND PARALYMPIAN SENIORS (AHOS)"

The AHOS project aims to improve physical activity opportunities for older people, people with disabilities and a specific group of former elite athletes who were highly physically active during their competitive careers but are less active after their competitive careers have ended, especially in late adulthood and beyond (65+).

The project developed a model for engaging older ex-competitors in regular physical activity and presented the results of the of the exercise programme for a group of older people.

The objectives of the AHOS project are:

- → To understand how factors related to the process of retirement from sport have influenced changes in physical activity in former elite athletes,
- → To contribute to successful post-retirement transitions of elite athletes with research findings and develop proposals for integrated systematic support for athletes,
- → To determine the physical activity levels of former elite athletes and the support they receive in their transition after retirement from sport in all partner countries,
- → To identify whether there is a link between participation in physical activity and life satisfaction, self-esteem, self-rated health, health-related habits and quality of life,
- → To develop an exercise model and present exercise recommendations for elder people.

The main target group are former elite-athletes.

Maintaining physical activity, at least at the suggested healthy level, is not something that can simply be expected after the end of an individual's sports career. Continuing regular physical activity after retirement from competitive sport can be challenging. There are various reasons for a reduction in physical activity, such as injuries and poorer musculoskeletal health, being overloaded with other activities such as study, work, starting a family, physical activity suddenly no longer being structured into a daily routine, etc.

The transition process after the end of a career in elite sport is already well supported in terms of integration into education and work, but there are not enough activities developed to support former elite athletes to continue with the necessary physical activity.

Various studies have shown the benefits of physical activities for elite athletes throughout their active sports career: longer life expectancy (higher than in a comparative reference group (Sarna et al., 2000)), lower rates of hospitalisation later in life for heart disease, respiratory disease and cancer compared to a reference group (Kujala et al, 1996), better self-perceptions of their own health and

better health-maintenance habits, as they are less likely to smoke, are more physically active and have better mood compared to their peers (Kontro et al., 2017).

To support the maintenance of health and well-being of elite athletes and an effective transition to a new 'post-sport' pathway, it is essential to include activities to continue physical activity at least at the level recommended for the general population in the care and support of a successful adaptation to retirement from sport. As there is evidence of the beneficial effects of physical activity, the project has focused on former athletes and has developed proposals for their involvement in physical activities.

It is important to stress that former elite athletes can be role models. Thus, the project appeals to them as a target group to be active and participate in various physical activities, while on the other hand the target group can be used to promote physical activity for elderly, as elite athletes can be role models (Athletes as Role Models at EU Level in the Framework of the European Week of Sport).

It is very important that we follow elite athletes beyond their sports career and into their old age to find the forms and types of sporting activity that they are willing to continue to maintain their wellbeing, health, and quality of life.

Research suggests that physical activity may play a protective role against depression among former elite athletes as they age (Bäckmand, Kaprio, Kujala & Sarna, 2003).

Former athletes can also be role models for other elder people.

ELITE SPORT

Sport is a component of variations, which include elite sport, sport education and sport recreation, as well as physical activities, which are an integral part of kinesiotherapy (Berčič, 2015). For elite sport, it is considered (Petrović,1986) that, by all possible criteria, sports training is nothing more than hard physical and mental work.

Intense sport participation influences athletes' personal, physical, emotional, intellectual, and social development. Research on personality in sport focuses primarily on finding and understanding personality traits, goal orientations and emotions, and how these factors influence performance and psychological development in sport (Tušak, Marinšek & Tušak, 2009).

Tušak and Faganel (2004) state that athletes have a specific psychological profile, with higher levels of self-confidence, extraversion and motivation, and lower levels of anxiety and depression compared to non-athletes.

Researchers studying the conclusion of sports careers state that "almost two-thirds of athletes experience the unpleasant consequences of 'identity loss' followed by the formation of a new identity at the end of their career" (Cecić Erpič, 2002a, b). The awareness of the need to prepare athletes for life after their sports career is largely present in the professional and general public, but there is less awareness of the need to ensure that athletes continue to be physically active on a regular basis after the end of their sports career.

AGE AND AGEING

Ageing and old age cannot be avoided. Chronologically, in the developed world, this period is beyond the age of 65 and is often associated with retirement (WHO, 2017).

If we consider the end of a working career as a turning point, we should also consider the end of a competitive sports career as a kind of retirement, which requires a re-setting of values, goals, and activities, including a new organisation of participation in physical activities.

Ageing greatly depends on strength in many areas, from physical and mental health to economic and social well-being and a healthy environment. The socio-economic status has a major impact on health (Adams and White, 2004).

With age, changes occur in strength, muscle mass, cardiopulmonary efficiency, slowed metabolism, increased joint sensitivity and vulnerability, as well as prolonged recovery after work or sporting exercise (Spirduso, 1995).

The more pronounced decline in ability is particularly observed in muscle strength and functions related to the cardiovascular and respiratory systems. All these changes also apply to former elite athletes.

Regular recreational exercise is one of the most effective ways of combating these problems. Physical and mental functions can, in principle, be improved at any age. The acquired physical and motor base of an elite athlete provides a qualitative basis for continuing to more moderate physical activities, which are not necessarily related at all to the sport activity in which that person reached his or her competitive peak.

RECOMMENDED PHYSICAL ACTIVITY

Physical activity, as proposed by the World Health Organisation (WHO), is important for all age groups, but especially for children, the working population, and elder people. Physical activity is a prerequisite for healthy lifestyles and a healthy workforce and therefore contributes to achieving the main objectives of Europe 2020 Strategy, in particular growth, productivity, and health (EU Council Recommendations, 2013).

Increasing physical activity, such as walking, cycling, active recreation, sport, and play, is a guideline under the Sustainable Development Goals to improve the health of the human population at all ages. All forms of physical activity can provide health benefits if undertaken regularly and for an appropriate duration and intensity (EU Guidelines, 2008).

According to WHO recommendations (WHO, 2020), physical activity in elder people can be undertaken as part of recreation and leisure (play, sport, or planned exercise), outdoor exercise (cycling, walking, and cycling), work or household chores, in the context of daily occupational, educational, home or community settings.

Elder adults should engage in physical activity in the form of moderate-intensity aerobic exercise for at least 150 to 300 minutes, or vigorous-intensity aerobic activity for 75 to 150 minutes, or an equivalent combination of moderate to vigorous activity throughout the week, which means at least 30 minutes of moderate physical activity per day, preferably on all days of the week. Muscle-strengthening activities involving all major muscle groups are recommended at least two to several times a week, which further contributes to better health. Physical activity should be varied, emphasising functional balance and strength training at moderate or higher intensity three or more times a week. Physical activity that includes combinations of balance, strength, endurance, walking and physical functional training is recommended to prevent falls and injuries from falls (WHO, 2020).

EU guidelines (2008) point out that evidence showing the importance of physical activity for elder adults is growing. Although, the health status during ageing is largely attributable to lifestyle outcomes in adult life and even youth, the level of physical activity in elder adults is an important determinant of their physical fitness and continued ability to live independently. The positive effects of sustained physical activity are psychological (life satisfaction) and physical, physiological, and social health.

A MODEL FOR ENGAGING FORMER ELITE ATHLETES IN PHYSICAL ACTIVITIES

Physical activity is one of the most important factors, alongside a healthy diet, that people can use to influence their health at all ages.

The elite athletes who have brought us so much joy with their sport skills and successes need to be supported by both the sports organisations they represented and society in adapting to a new life situation after their careers have ended.

Some people are motivated enough to find suitable physical activities on their own, but most need support, encouragement, organised activities, and an invitation to take up regular activities after their sports career is over.

Sports clubs and organisations could play a very important role in encouraging former elite athletes to take care of their health.

Among the reasons for ending a sports career emerges that athletes often end their sports career due to injury, followed by work-related commitments and family commitments. This calls for more preventive activities to avoid injuries during the career and adequate care for the rehabilitation of injuries after the end of the sports career. The International Olympic Committee also recognises the importance of health promotion for athletes and, together with the World Olympians Association (WOA, 2021) and the International Federation of Sports Medicine, has designed a project in December 2021 to contribute to the long-term health benefits of Olympians and to promote healthy and active lifestyles and physical and mental health in their communities at all stages of their lives.

Most former surveyed athletes continue to play recreational sport in old age. Contrary to expectations, the support and cooperation that former elite athletes receive from their sports federations and the state after their sports careers are over, or as they get older, is minimal, if any. There is, however, self-initiated involvement in national and international competitions for seniors in selected sports.

The most common physical activities that former elite athletes engage in today after their sports careers are walking, running, hiking, cycling, volleyball, fitness, and martial arts. Among the preferences most frequently mentioned are dancing, volleyball, hiking, swimming, cycling and fitness, as well as therapeutic recreation. These activities are relatively consistent with the general guidelines for physical activity in the elder population.

Former athletes want to participate in competitions more than the general elder population.

The most important motivations for taking part in physical activity are health and well-being, good fitness level, relaxation, and fun, which should be taken into account when planning activities. Incentives for increased participation include accessibility and affordability of sports facilities, the variety of sports training on offer, professional guidance and socialising with former athletes.

Based on the results of the survey, where former elite athletes expressed their desire and expectations, and indicated their interests in physical activities after the end of their careers, we have developed recommendations for sports organisations that have a potential positive impact on increasing the participation of former elite athletes in regular physical activities, and thus also a positive impact on the health of a specific group of people, and through them, the population at large, as they are a role model and a motivation for others.

In the future, it is necessary:

- → To observe better the **transition from vigorous physical activity during elite sports career** to post-competitive regular physical activity for elite **female and male athletes**.
- → **To pay more attention to education and training of specialists** that work in selected areas of recreational activities for elder people, including former elite athletes.
- → **To make available relevant literature** in the field of sport and recreational activities for the elderly, including for associations, clubs and individuals involved in exercise.
- → **To promote ways of organising physical activities for** former elite athletes of different qualities and **integrating activities for master athletes into regular activities of sports organisations.**
- → **To develop a training model to** facilitate the planning and implementation of sport and recreational physical activities with former elite athletes.
- → **To respect more the organisation of preferred sports activities by former elite-athletes** (hiking, running, volleyball, swimming and water activities, and dancing) and competitions at different levels.
- → **To increase accessibility to sports facilities**, including through an appropriate pricing policy. Taking care of one's own health and well-being also saves money on health care costs.

We have grouped the recommendations into five thematic clusters:

1. Involvement in the organisational and professional activities of the sport branch, federation, or association (taking on different organisational functions, professional roles, developing competences for specific roles: referee, coach, delegate, etc.). Sport organisations should make efforts to encourage former elite athletes to participate in their sport and organisation after their competitive sports career. This way, they will keep in touch with sport, be involved in different activities, feel useful and, in fact, as sports workers, coaches, referees, be able to contribute to further development. This involvement can be in the local environment or at national level.

2. Connecting, engaging, and socialising (invitations to sports events, meetings of former and active athletes, annual sports, and social gatherings), sports organisations, organisers of major sports

competitions and events, will involve former elite athletes by inviting them to events. They can be invited to planned competitive events or to events they organise for former athletes to socialise, educate, network, and provide support. Certainly, bringing former elite athletes together through mass or competitive events can be a means for successful reactivation and integration into sport and later into regular training programmes.

3. Health promotion (health maintenance, regular medical check-ups, consultation with a personal doctor or specialist before engaging in new forms of exercise, self-assessment apps and suggestions for action, awareness-raising about the importance of regular sports activity, advice on physical activity, nutrition, and other life challenges), as is the case for the general population, former elite athletes also need to take care of their health and well-being. Sport can enable them to do this and their prior knowledge of sport, sport disciplines, training methods, sports facilities is certainly an advantage. However, when planning training and activities, it is essential to bear in mind that the target group at stake are former elite athletes. It is characteristic that they have performed at the highest possible level during their competitive career. Engaging in sporting activities at too high a level could pose a significant risk in a period of old age, reduced physical capacity, physical limitations, and possible health problems. Organisers of exercise programmes need to be aware of this and plan and monitor programmes accordingly.

4. Participation in physical activities: choosing the right sport and adapting the sporting activity and providing access to training and sports facilities (introducing and integrating new sports and activities, adapting equipment, rules, organising guided training and veterans' competitions), former elite athletes may not be able to play the sports in which they competed and performed at old age. In some cases, this means that they will still have to learn certain sports. Such a fact opens the possibility of a reluctance on the part of a former elite athlete to try out a sport in which he or she is not performing above average. The approach of learning new movements and performing new training activities can be time-consuming and may present resistance. A former elite athlete might prefer to be inactive for this reason, rather than being seen by some as a learner, whereas in the past he or she has been a national or even international hero in the field of sport.

5. Promotion of individuals and activities for master athletes (nomination for various sports awards, promotion of master's sport in the media).

The recommendations have different financial requirements; some are low-cost and rely only on the attention and goodwill of the organisations' representatives, while others require more financial resources.

AREA	**Involvement in the organisational and professional activities of a sport branch, federation, or association**
TITLE OF RECOMMENDATION	INVITATION TO STAY AND WORK IN SPORT, TO TAKE OVER A ROLE IN A SPORT ASSOCIATION (ORGANISING EVENTS, COACHING…)
DESCRIPTION OF THE RECOMMENDATION AND GUIDELINES FOR IMPLEMENTATION	Follow up athletes after their careers have ended and maintain regular contact with them. Develop plans for active involvement in sports activities for athletes after their careers at federal level (opportunities to participate in training for 2 years after retirement, involvement to work in sport, organised competitions for veterans, promotion of athletes through awards and invitations to events). At the level of associations, organise recreational training, occasional meetings of former competitors, training matches with active (young) competitors, involvement of seniors in the work and events of the association, honorary membership, ambassadors, … Provide training for coaches, referees, organisers. Premature ending of sporting careers due to work and study commitments can be avoided by adjustments to educational process or involvement in public administration during the career itself.
PURPOSE OF THE MEASURE	To enable former athletes to remain active in the field of sport after their sports career at national and local level, or to enable athletes who are still active to adjust their educational process or to join the public service during their career.
FINANCIAL, TIME, HUMAN RESOURCES	Cooperation between the Olympic Committee and the federations should be established in order to provide funding for post-career training for athletes, thus ensuring the recruitment of new staff for the development of the sport and to obtain funding for their work. To provide financial support and adapt educational/employment opportunities for athletes while they are still active in the sport.
INTENDED IMPACT	After their competitive sports career, former elite athletes use their rich experience and stay connected to their core activity, i.e., sports. By being actively involved and using their knowledge, they are motivators to recruit more younger people to be involved in sport.

AREA	**Connecting, engaging, and socialising**
TITLE OF RECOMMENDATION	INVITATION TO PARTICIPATE IN DIFFERENT ROLES IN SPORTS EVENTS (VIP, GUEST, AMBASSADORS)
DESCRIPTION OF THE RECOMMENDATION AND GUIDELINES FOR IMPLEMENTATION	Sports organisations (Olympic committee; National sport federations and Sport clubs) could invite their former members to their events and competitions. A list of elite athletes who have retired from competitive sport should be prepared (regularly updated) and ex-athletes should be invited to sport events at local and national level.
PURPOSE OF THE MEASURE	Active involvement in the local community and participation in the national field, which for the athlete after the end of his/her career means social integration, social gatherings, and motivation to socialise (expanding the social network). Volunteering activities, to which active members can invite former athletes, are also welcome and appreciated.
FINANCIAL, TIME, STAFFING	in this case, there is a shortfall in income if you invite people to an event and they don't buy a ticket, which means no additional costs.
INTENDED IMPACT	Improving the sense of belonging and mental health of former elite athletes.

AREA	**Health promotion**
TITLE OF RECOMMENDATION	HEALTH ASSESSMENT BEFORE ENROLMENT IN PHYSICAL ACTIVITY
DESCRIPTION OF THE RECOMMENDATION AND GUIDELINES FOR IMPLEMENTATION	It is desirable that former athletes continue to have regular check-ups with occupational health specialists after their careers have ended. If this is not possible, they should at least have a discussion with their personal physician about their involvement and a basic health check-up (basic blood, urine, cholesterol, sugar and blood pressure) before starting a new activity. Athletes should have access to appropriate rehabilitation even after they have decided to end their sporting career. Every effort should be made to ensure that they are able to rehabilitate their injuries and have the opportunity to take part in activities that are appropriate to their state of health.
PURPOSE OF THE ACTION	preventive health care
FINANCIAL, TIME, STAFFING ASPECTS:	no additional financial requirements for a consultation with a personal physician; however, for a specialist examination, adequate funding would need to be provided at national level or at least two years after the end of the career.
INTENDED IMPACT	Prevention of adverse effects of sporting activity resulting from over-exercise and adequate rehabilitation.

AREA	**Health promotion**
TITLE OF RECOMMENDATION	ACCESS TO HEALTH IMPROVEMENT ADVISORY SERVICES, ADVISORY ON PHYSICAL ACTIVITY, NUTRITION AND OTHER LIFE CHALLENGES
DESCRIPTION OF THE RECOMMENDATION AND GUIDELINES FOR IMPLEMENTATION	The former elite athlete should be given the opportunity to consult individually with experts (possibly in the framework of the National Medical Sports Centres or the Regional Olympic Committee Offices) in different fields (doctor, sports medicine specialist, psychologist, healthy nutritionist, sports exercise expert for the elderly, veteran's exercise experts per sport).
PURPOSE OF THE ACTION	To provide former athletes with personalised advice on various problems they face after their careers, in maintaining their health and in engaging in physical activity.
FINANCIAL, TIME, HUMAN RESOURCES	It is necessary to obtain the cooperation of various experts and the resources to do the work.
INTENDED IMPACT	Improved physical and mental health of former elite athletes and increased participation in regular sporting activities.

AREA	**Involvement in physical activity**
TITLE OF RECOMMENDATION	INVITATION TO PARTICIPATE IN ACTIVE REGULAR PHYSICAL ACTIVITY IN SPORTS ORGANISATIONS OF WHICH THEY WERE MEMBERS
DESCRIPTION OF THE RECOMMENDATION AND GUIDELINES FOR IMPLEMENTATION	Sports organisations would make an important contribution to maintaining the health of former elite athletes through organized sports training for masters. It is recommended to contact athletes after their sports careers and invite them to become active in the sport they were involved in (e.g., as an invitation in the local media with the location, date, and time of the meeting), or to allow athletes from other disciplines to join the masters' training. The first meeting is a get-to-know-you meeting, where physical abilities, motives for exercise and general satisfaction should be checked. At mid-term review, physical ability, motivation and satisfaction are checked and progress monitored. It is important to reinforce group cohesion at the time of joining in order to create a positive group dynamic.
PURPOSE OF THE MEASURE	To enable former athletes to actively participate and regularly exercise in the sport in which they used to participate in order to be physically active and to maintain their physical fitness and health.
FINANCIAL, TIME, STAFFING	Linking up with associations that can organise guided training and competitions (not only veterans, also with current cadet and youth teams), providing adequate equipment and financial support for training and competitions (tenders at local and national level).

AREA	**Involvement in physical activity**
TITLE OF RECOMMENDATION	ACCESS TO SPORT INFRASTRUCTURE AND TRAINING
DESCRIPTION OF THE RECOMMENDATION AND GUIDELINES FOR IMPLEMENTATION	Former elite athletes should be given free access to training and sports facilities. At the local community level, the contact with athletes after their sports careers should be establish and the sports organisations and community should encourage them to become physically active. Check what sports activities they are interested in, invite sports organizations to involve masters' programs in their regular activities and encourage former athletes to take part. Former elite athletes have expressed sport and recreation preferences in AHOS survey, such as a desire to participate in dance, volleyball, hiking, swimming, cycling and fitness. They also expressed a desire for therapeutic recreation. Introduction of those activities could be helpful in the efforts to rise the engagement of former athletes.
PURPOSE OF THE MEASURE	To enable former athletes to actively engage in their desired sporting activity with the aim of physical exercise and maintaining physical fitness.
FINANCIAL, TIME, HUMAN RESOURCES	Free access to exercise and existing sports infrastructure in the local area (e.g., sports card) linking up with associations providing organised exercise for the elderly and organising competitions.

AREA	**Involvement in physical activity**
TITLE OF RECOMMENDATION	SELECTING THE PROPER SPORT AND ADAPTING THE PHYSICAL ACTIVITY, ORGANISING THE ACTIVITY WITH PROFESSIONAL STAFF.
DESCRIPTION OF THE RECOMMENDATION AND GUIDELINES FOR IMPLEMENTATION	To enable athletes to exercise the sport activity they desire, considering their health abilities. Warm-up for injury prevention, the game or exercise itself and cool-down are important. Differences in the training of active and veteran athletes and in the training of elder veterans should be considered. Training should take place one to two times a week, adapted to physical abilities of the individuals (care should be taken to avoid injuries during training), with elements of reduced-activity exercises if necessary, and as an enjoyable social activity with elements of play, fun and relaxation. It is recommended for the exercise to last from 45 to a maximum of 90 minutes, consisting of a 10 to 20 minutes of warm-up, a 30 to 60 minutes of active exercise and a 5 to 10 minutes of cool-down and relaxation (exercise should be completed sooner rather than later). When there is no group exercise, an individual exercise programme is prepared for each person.
PURPOSE OF THE MEASURE	To encourage former athletes to become motivated to become active in the field of sport.
FINANCIAL, TIME, HUMAN RESOURCES	Free provision of appropriate organised guided exercise.

AREA	**Involvement in physical activity**
TITLE OF RECOMMENDATION	ORGANISATION OF COMPETITIONS
DESCRIPTION OF THE RECOMMENDATION AND GUIDELINES FOR IMPLEMENTATION	Various friendly meetings and competitions, competitions between clubs and associations, at national and international level (e.g., national veterans' competitions, international competitions) are organised.
PURPOSE OF THE MEASURE	The desire to compete can be a motivating factor to join a sporting activity. Veteran athletes are actively involved in the organisation of meetings and competitions, which can further act as a motivating factor.
FINANCIAL, TIME, HUMAN RESOURCES	To secure funding for the organisation of events and competitions at local, national, and international level (calls for tender at local and national level, liaison with OCs).

AREA	**Promotion of individuals and activities for veterans**
TITLE OF RECOMMENDATION	PROMOTE INDIVIDUALS AND MASTER SPORT IN MEDIA AT LOCAL AND NATIONAL LEVEL
DESCRIPTION OF THE RECOMMENDATION AND GUIDELINES FOR IMPLEMENTATION	When sports organisations (OCs, federation, association) plan promotional activities and media cooperation, they should also include information on activities for veterans and emphasise the positive impact of regular activity on health. It is beneficial to build on good practice presentations: showcase well-known athletes who are regularly active (role models for others).
PURPOSE OF THE MEASURE	To increase the involvement of former athletes in regular sports activities and to retain former top athletes in sports organisations as ambassadors, promoters, role models, etc.
FINANCIAL, TIME, STAFFING	If the promotional activities are part of other activities, there are no additional financial resources.
ANTICIPATED IMPACT	More former athletes who are regularly physically active.

AREA	**Promotion of individuals and activities for masters - Promotion of former elite athletes**
TITLE OF RECOMMENDATION	TO NOMINATE FORMER ELITE ATHLETES FOR DIFFERENT AWARDS AT LOCAL AND NATIONAL LEVEL
DESCRIPTION OF THE RECOMMENDATION AND GUIDELINES FOR IMPLEMENTATION	By nominating their members, sports organisations (OCs, federation, association) give recognition to individuals and increase the likelihood that they will engage in various physical activities or work in sport in different roles.
PURPOSE OF THE MEASURE	To highlight and recognise the importance of the achievements of former athletes and to increase the chances of athlete retention in sports organisations.
FINANCIAL, TIME, STAFFING	Secure funding for the sports prize.
INTENDED IMPACT	Increased sense of self-worth of the awardees, promotion of the sport, visibility of former athletes, potentially increased involvement in sports activities and sports organisations.

IDENTIFYING AND MONITORING MOTOR SKILLS

Before the initial exercise, it is necessary to measure your initial state of fitness.

To determine physical fitness, we use movement and functional tests that allow easy testing, such as the Fullerton Test Battery (Rikli & Jones, 1999a, b) or the Senior Fitness Test Manual - SFT (Rikli & Jones, 2013), which tests the functional fitness of elder people. Testing should be carried out before the initial exercise and again after a period. If exercise is performed for one season, for example from September to June, it is recommended to test halfway through the exercise period, but mandatory at the end of the exercise period, as repeated testing allows us to better monitor the progress of strengthening motor skills.

Tests are carried out based on the following test battery:

→ Getting up from a chair for 30 seconds (testing leg strength),
→ Balance on one leg with eyes open for 90 seconds (balance test),
→ Weightlifting in a seated position for 30 seconds (biceps test),
→ Sitting reach (lower body flexibility test),
→ Touching hands on the back - scratch test (shoulder range of motion test),
→ Get up and go (functional mobility testing),
→ Walking for 6 minutes or walking for 9 minutes (general-aerobic endurance testing),
→ Standing in place for 2 minutes (general-aerobic endurance test),
→ Fist clench - measuring power with a dynamometer (grip strength testing).

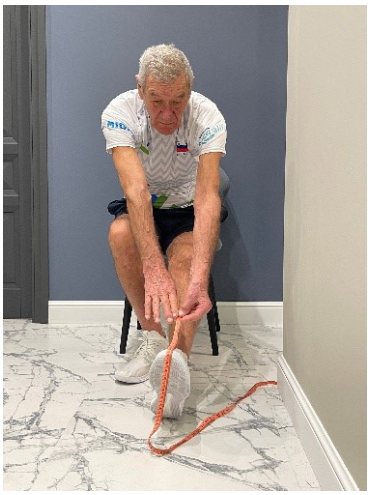
Descriptions of how to carry out motor skills testing

Getting up from a chair - 30 seconds: the subject sits on a chair with a seat height of 43 cm with erected torso, arms crossed on the chest and hands on opposite shoulders. After the start signal, the subject straightens up to a standing position, extends the knees and then lowers into a sitting position on the chair. The number of correct repetitions performed by the subject in 30 seconds is measured. If the subject is in the righting phase at the end of the 30 seconds, the repetition is considered successful.

Balance on one leg with eyes open: the test subject stands sideways against a wall so that it can catch itself with its arms in case of balance loss. When ready, it lifts one lower limb of its choice off the floor and slightly bends it at the knee. The subject keeps its eyes open during the task. The time from the beginning of the task to the moment the subject touches the floor with the lower limb flexed, or a maximum of 90 seconds, is measured. The result is measured to the nearest second. Three repetitions are measured and the average of the three results is taken as the final one.

Seated weightlifting: 30 seconds (biceps test): the subject sits on a chair with erected torso and feet flat on the floor. The side with the non-dominant upper limb is moved to the edge of the chair. With the dominant upper limb, grasp the arm in a handgrip position with a forked grip and the palms facing inwards, with the upper limb at right angles at the elbow and the upper arm fixed against the trunk, so that the subject lifts only the forearm. The amplitude of the movement is between 45 and 60 degrees. The arm-weight is 2.3 kg for women and 3.6 kg for men. The result is the number of repetitions correctly performed in 30 seconds. If the test subject performs more than half of the flexion in the last second, the measurement is considered successful.

Sitting reach: place a 43 cm high chair against the wall to prevent the chair from moving. The subject sits on the edge of the chair with one leg bent and one foot on the floor and the other leg extended with the heel on the floor, and the foot perpendicular to the shin. The subject extends the arms and places the palms on top of each other so that the fingers are overlapping. The subject brings the fingers close to the foot, with the back straight and the head upright. It holds the position for 2 seconds and performs 2 repetitions. Measure the distance to the nearest centimetre from the tip of the middle finger to the tip of the shoe. If the tips of the fingers touch the tip of the shoe, a value of 0 is recorded, if they are above the tip of the shoe, the measured value in centimetres is negative, if they are below the tip of the shoe, the measured value in centimetres is positive.



Back scratch - touching hands on the back: the subject stands with one upper limb flexed back from the neck towards the back, and with the other limb, approaches the flexed first upper limb from the back and tries to bring both hands as close as possible to the middle of the back with the middle fingers. Three repetitions are performed. The distance between the tips of the middle fingers is measured to the nearest centimetre. If the fingers are not touching, the result is negative, if the fingers are overlapping, the result is positive. If the fingers are touching, the result is zero. The average of the three results is the final one.


Get up and go: use a 43 cm high chair, anchored against the wall to prevent it from moving, and an upright bar placed 2.4 m away from the chair. To perform the task, the subject sits in the chair with erected torso, hands resting on the thighs, feet flat on the floor and one lower limb slightly in front of the other. After the start signal, the subject stands up and walks as quickly as possible to the bar, around it and back to the chair, where it sits to the initial position. The test is performed three times. The result is measured to the nearest 0.1 seconds from the start signal to the resumption of the sit. The average of the three results is the final one.


6-minute walk (or walk for 9 minutes): test walking in small groups. The test polygon is carefully marked and measured. The test subjects start walking around the markings after the start signal. They are instructed to walk as fast as they can according to their ability. They can stop or adjust their walking speed if necessary. During the course, we remind them of the walking time to motivate them. The test takes 6 or 9 minutes. The result is the sum of all the laps walked plus the extra distance in the incomplete last lap, measured to the nearest metre.

2-minute Step test - stepping in place for 2 minutes: mark on the wall the height between the kneecap and the intestinal ridge. The test subject stands at the marked wall and steps in place for 2 minutes, bringing the knees up to the marked height. The subject may rest or hold on to the wall with one hand. The result is the number of times the right knee is raised to the indicated height.

Squeezing fists by dynamometer: Fist clench: The subject grasps the handle of the dynamometer with its dominant upper limb of its choice, then squeezes the handle to the maximum and maintains the clench until maximum muscle force. We use the Jamar Hydraulic Hand Dynamometer - 5030J1 (Sammons Preston, Providence, USA). The task is performed with three repetitions, with a short muscle relaxation break in between. The measured force of the subject is given in kilograms and recorded. The average of the three results is the final one
In Slovenia, the National Institute of Public Health (NIJZ) (2015) published the Physical Fitness Test for the Elderly in the Health Promotion Module Implementation Manual, based on the original by Rikli & Jones (2013).

The manual publishes the norms for each test for the Slovenian context: http://skupajzazdravje.nijz.si/media/test.telesne.pripravljenosti.za.starejse.pdf,
the tests and norms described in the original are available on the website: https://books.google.si/books?id=NXfXxOFFOVwC&pg=PA11&hl=sl&source=gbs_toc_r&cad=3#v=onepage&q&f=false

The validation was carried out on the age group 60 to 94 years, with a total of 4262 active and 2261 inactive individuals.

Table: Senior fitness test – SFT. Means and Standard Deviations (in Parentheses) for Active Versus Inactive Older Adults

	AGE GROUP							
Activity level	**60-64**	**65-69**	**70-74**	**75-79**	**80-84**	**85-89**	**90-94**	**Combined ages**
Group size (N - numerus)								
Active (N)	538	986	1130	847	425	235	101	4262
Inactive (N)	239	420	504	481	299	200	118	2261
Chair stand - getting up from a chair – stands (SFT means and standard deviations)								
Active	15.6 (4.3)	14.7 (3.9)	14.0 (3.9)	13.6 (4.1)	12.3 (3.9)	11.3 (3.9)	10.5 (3.9)	13.9 (4.1)
Inactive	13.8 (3.9)	12.8 (3.6)	12.2 (3.6)	11.8 (3.7)	10.5 (4.2)	9.4 (4.0)	6.9 (4.7)	11.7 (4.1)
Arm curl - weightlifting sitting – reps (SFT means and standard deviations)								
Active	17.6 (4.7)	16.9 (4.9)	16.0 (4.8)	15.5 (4.5)	14.5 (4.2)	13.3 (3.8)	12.2 (3.5)	16.0 (4.6)
Inactive	15.7 (4.8)	14.9 (4.5)	14.1 (4.3)	13.4 (4.3)	12.9 (4.5)	11.8 (3.9)	10.4 (3.7)	13.7 (4.5)
6-minute walk – yds (SFT means and standard deviations)								
Active	638 (91)	607 (102)	588 (94)	551 (106)	524 (97)	485 (108)	427 (120)	576 (110)
Inactive	595 (95)	545 (113)	512 (109)	477 (123)	417 (130)	384 (147)	305 (127)	489 (138)
2-minute step test – stepping in place for 2 minutes - steps (SFT means and standard deviations)								
Active	100 (23)	98 (26)	92 (25)	92 (25)	85 (24)	78 (22)	78 (21)	93 (25)
Inactive	85 (23)	86 (24)	80 (25)	78 (24)	69 (23)	61 (19)	52 (21)	77 (25)
Chair sit-and-reach – in. (SFT means and standard deviations)								
Active	2.1 (4.2)	1.7 (4.0)	1.1 (4.0)	0.9 (4.1)	-0.1 (4.4)	-0.3 (4.2)	-1.6 (3.6)	1.1 (4.2)
Inactive	0.8 (4.2)	0.6 (4.1)	0.5 (4.0)	-0.1 (4.3)	-0.6 (4.2)	-1.0 (3.6)	-2.9 (4.6)	-0.0 (4.4)
Back scratch - touching hands on the back – in. (SFT means and standard deviations)								
Active	-1.2 (3.9)	-1.9 (4.3)	-2.2 (4.2)	-2.7 (4.4)	-3.1 (4.7)	-3.8 (4.8)	-4.6 (4.7)	-2.3 (4.4)
Inactive	-2.0 (4.3)	-2.6 (4.4)	-3.1 (4.5)	-4.0 (4.9)	-4.2 (4.9)	-5.2 (4.6)	-6.2 (5.4)	-3.6 (4.8)
Get up and go – sec (SFT means and standard deviations)								
Active	4.9 (1.1)	5.2 (1.1)	5.5 (1.3)	5.8 (1.4)	6.5 (1.6)	7.2 (2.0)	7.6 (1.9)	5.7 (1.5)
Inactive	5.4 (1.4)	5.8 (1.4)	6.3 (1.9)	6.8 (1.9)	7.6 (2.6)	8.3 (3.1)	10.1 (3.6)	6.7 (2.3)

Source: Rikli and Jones, 2013

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