

# INSUFFICIENT PHYSICAL ACTIVITY AND ITS IMPACT ON NATIONAL ECONOMY AND SECURITY

**Kristīne Kuzņecova**

Daugavpils University, Latvia

**Abstract.** *Healthy and active people not only strengthen the health of the population of Latvia, prolong life in good health, prevent premature mortality, but also make an important contribution to the economic development and security of the country. Unfortunately, Latvia ranks among the last places in a number of areas among the EU member states. Latvian Health and Fitness Association (LVFA) has adapted the “Deloitte Research” global study on the preventive impact of physical activity on the national economy to the circumstances in Latvia, revealing that the Latvian economy suffers significant losses every year due to physically inactivity among the population. Furthermore, insufficient physical fitness also affects the internal and external security of the country. Must be concluded also across the globe governments face rising healthcare costs and the increasing prevalence of lifestyle diseases. This raises questions as to how bet improve the health of populations, while keeping healthcare and security costs under control. The aim of the article is to study the impact of insufficient physical activity on the national economy and security, to recommend directions for policy development in this field, and to propose improvements of the legal framework. Analytical method, comparative method, as well as the method of qualitative and quantitative data analysis were used in the development of the article.*

**Keywords:** *economy, public health, security, sport.*

## Introduction

Since the restoration of Latvia’s independence, much has been done – a democratic state system has been established and developed along with a liberal and open market economy, and Latvia has successfully integrated into international structures, yet it can be concluded that the country’s development has been insufficiently consistent and coordinated. Several scenarios are possible in the further development of Latvia, but it must be recognised that only a human-centred growth model (Latvijas izaugsmes modelis. Cilvēks pirmajā vietā, 2005) can ensure a rapid and stable path towards the average standard of living of the EU member states, which corresponds to the protection of the rights and interests of each individual and thus Latvia’s national interests.

Although each of us may have different values, priorities, and personal interests, in general, one can say that each individual’s most important needs are focused on three vital factors: well-being, safety and sustainability. Healthy and active people not only strengthen the health of the population of Latvia, prolong

life in good health, prevent premature mortality, but also make an important contribution to the economic development and security of the country.

The Latvian Health and Fitness Association in cooperation with the Statistical Laboratory of the University of Latvia has adapted the global study by Deloitte Research on the preventive impact of physical activity on the national economy (Economic Health & Societal Well-being: Quantifying the Impact of the Global Health & Fitness Sector Global Report, 2022), revealing that physical inactivity among the Latvian population is insufficient, and thus considerably impacting the overall public health situation and the Latvian economy. Furthermore, insufficient physical fitness of the relevant defence and security institutions' personnel also affects the internal and external security of the country.

A significant number of quantitative and qualitative studies on the impact of physical activity on human health have been carried out in Latvia and Europe, ranking Latvia among the last places in a number of areas among the EU member states. An interdisciplinary approach is fundamentally important in the development of all sectors. This means that social, economic, legal, political, psychological, etc. aspects must also be taken into account in the analysis of sport and physical activity.

The aim of the article is to study the impact of insufficient physical activity on the national economy and security, to recommend directions for policy development in this field, and to propose improvements of the relevant legal framework. The scientific novelty of the article is rooted in an interdisciplinary approach to the exploration of the sport sector, including social and economic impact assessment.

### **An outline of the sport environment in Latvia and the world**

The origin of sport dates back to 776 BC, with the emergence of the Olympic Games in ancient Greece. Religion played a significant role in Greek life and the Olympic Games had a strong religious component, i.e. worshipping of gods. (Oksleids & Bolheimers, 2000). Nowadays, sport is available to every individual, and athletic achievements are no longer associated with religious rituals and worshipping of gods. In the 21<sup>st</sup> century, the interpretation of the concept of sport reveals a much broader impact on society. Sport is an important part of the culture of society, which ensures the fulfilment of various state functions in society – educational, health, social, cultural, economic, political, recreational, and entertainment, thus highlighting the multifaceted nature of the concept of sport.

Conventionally, sport is understood to mean all types of individual or organised activities in order to maintain and improve physical and mental health, and also to achieve success in sports competitions (Sporta likums, 2002). However, it is not possible to look at the concept of sport only from such a narrow

point of view. It is known that more and more people are not only engaged in sports, watching sports, reading about sports and attending sports events. Sport is not only engaged in school and leisure time, but for many people it is also a profession, also becoming an important part of the media content. As J. Alfejeva rightly points out, the perception of the inseparable relationship between sport and physical activity has changed over time, and sport disciplines include activities that are not directly related to physical exertion, such as chess, checkers and bridge (Alfejeva, 2018).

The European Sports Charter (revised by the Council of Europe on 13 October 2021) offers a broader view of the concept of sport than in the so-called traditional or narrow approach, namely, all forms of physical activity which, through casual or organised participation, are aimed at maintaining or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels (European Sports Charter, 2021). Thus, the concept of sport, which once was characterised only by striving for high achievements, has become much broader today. The definition of sport in the Charter, which initially links sport with physical activity, also refers to the improvement of the mental state, emphasizing the importance of its social role and the creation of social relations.

In Latvia, targeted development of the sport sector and the relevant legal framework began in 2002, when the Sports Law was adopted. The purpose of this Law is to specify the general and legal basis for sports organisation and development, mutual relationships of sports organisations, State and local government institutions and basic tasks in sports development, and the basis for the financing of sport, and also the principles that shall be followed when taking part in the international sports movement (Sporta likums, 2002). Since 2004, the Latvian Government has also approved a number of policy documents, most recently, the Sport Policy Guidelines 2022-2027.

According to Section 5 of the Sports Law, the Ministry of Education and Science plays a leading role in the implementation of sport policy. The development of the national sport policy also involves the Latvian National Sports Council, which includes several other important organisations – the Latvian Sports Federations Council, the Latvian Olympic Committee, the Latvian Health and Fitness Association, etc., the aim of which is to promote the development of sport and cooperation in the field of sport, as well as to take decisions on sport-related matters (Latvijas Nacionālās sporta padomes nolikums, 2003). On the one hand, the organisational governance structure of the sport sector is constantly and purposefully working on structural reforms and implementation of good practices in the sector, however, on the other hand, these initiatives are not always sufficiently effective in contributing to the sustainable development of the sector, the growth of the Latvian economy, and the promotion of public health.

According to the author, today, strategic planning in the Latvian sports sector has gained much greater and more acute significance due to several considerations.

Firstly, as the legal regulation of several sports activities evolves, the concept of sport is also included in the legislation. However, sport as a legal concept is still not clearly defined. In most cases, legislation and policy documents provide for a different interpretation of sport, and the responsible institutions lack a common understanding of the concept, mostly relying on a general understanding of the meaning of sport.

Secondly, the sport sector is currently in an unprecedented crisis of trust and reputation. In recent years, disagreements of different nature and scale, scandals and lack of discussion among sports organisations have emerged in the public space, which have had a negative impact on the reputation and trust of the sector.

Thirdly, in the joint health report published by the European Commission and the Organisation for Economic Co-operation and Development (OECD) in 2023, Latvia ranks along with its neighbour Lithuania as well as Hungary and Slovakia among the countries with the shortest life expectancy (Health at the Glance, 2023). This is largely due to unhealthy habits and lifestyles, as well as limited access to sport and health services. Effective and sustainable sport policy not only promotes athletic achievements and promotes healthy lifestyles, but also provides economic benefits. In turn, diverse physical activity not only provides physical and mental well-being, but also improves overall health, while further promoting social inclusion (*Sporta politikas pamatnostādnes 2022.–2027. gadam*).

Fourthly, as mentioned above, the sport sector is inseparable from the social and economic dimension. The sport and health sector makes an important contribution to the GDP and employment worldwide. Global studies show that every year the sector directly contributes several billions to the value added in terms of GDP and creates millions of jobs (Hafner, RAND, 2019). In addition, the sector supports indirect job creation and GDP contribution, generating demand for goods and services. Another important aspect that follows from Latvia's case analysis – every physically inactive employee costs the Latvian economy EUR 814.21 per year. The total annual loss to the state budget is EUR 41.5 million, due to the decrease in productivity caused by the lack of physical activity (*Ekonomiskā veselība un sabiedrības labklājība: Globālās veselības un fitnesa nozares ietekmes kvantificēšana - Latvija, Deloitte Research, 2023*).

Latvia has tried to implement various initiatives in the field of sport development, mostly in response to the pressing problems within the sport sector, however, it must be concluded that the development process has been fragmented with often ambiguous outcomes. The development of the sport sector requires a systemic approach, focusing both on general public policy areas and specific sport policies. The aim of sport policy is to develop not only high-performance competitive sport, but also grassroots sport, children's and young people's sport,

as well as the health and fitness sector, promoting physical activity and interest in sport among entire population, promoting access to and development of sports infrastructure.

Arguably, the global health and fitness industry has experienced rapid growth over the last decade. In the West, since the 1980s, health and fitness centres have become more widespread and in growing demand. With the development of the industry, the offer has become increasingly diverse – from large sports halls for a wide range of visitors to small specialised studios, high-tech and innovative fitness gyms. The sector's revenues have increased worldwide. This is due to the fact that especially in recent years the level of public awareness has increased and people attach an increasing importance to health and a balanced lifestyle. At the same time, various initiatives have been taken in many countries against sedentary lifestyles and in favour of health promotion, thereby further stimulating growth of the sector.

Examining examples of foreign practices, it is the countries in Asia, the Pacific region and Latin America that have shown the highest growth in the past decade. The rapid growth in these regions is natural, as the health and fitness sector in these regions is generally new and less saturated compared to North America or Europe, which gives the sector more growth opportunities. At the same time, with the development and rising income in these regions, the population increasingly turn to the Western way of life. In conclusion, sedentary work is increasingly spreading, the diet increasingly consists of low-quality food, which contributes to health problems and obesity. In response to these negative trends, many citizens, especially the younger generation, are focusing on physical activity and fitness, thus contributing to the development of the industry (IHRSA Global Report, 2023).

By comparison, the United States is still the largest fitness industry market in the world, followed by the largest European countries. The world's highest rates of physical activity among the adult population are in Sweden (34 %), the United States (30 %), the United Kingdom (23 %), Australia (23 %), and Germany (22 %). According to Eurobarometer, only 9 % of the Latvian population regularly engage in physical activity and only 7 % of the population attend sports clubs and/or gyms (EC Eurobarometer, 2022). Referring to a number of foreign studies, sports clubs are the environment where people learn to exercise properly without harming their health. Sports clubs have access to all the necessary infrastructure (TFCPS, 2002) and encourage discipline (Charness, Gneezy, 2009), highlighting the role of sports clubs in raising the level of public health and their integral role within the sport sector.

### **Impact of physical activity on the economy**

Another important aspect that the author wants to emphasise is the impact of physical activity on economic development. The most important indicators of Latvia's growth and development are determined by the synergy of three factors, with an equally important and complementary role. First, economic development. Second, comprehensive security. Third, democratic values and the protection of the public interests.

Examining the Economic development of Latvia Report 2023 and the economic outlook for the coming years, one may conclude that following the rapid recovery of the economy from the COVID-19 pandemic crisis in 2021, the economic growth in Latvia slowed to 3.4 % in 2022. Furthermore, in 2022, economic development was significantly affected by the disruptions in supply chains caused by Russia's invasion of Ukraine, rising inflation caused by energy and food prices, as well as by a declining global demand. In 2023, economic development continued to be influenced by geopolitical situation and uncertainty, high prices and rising bank interest rates (Latvijas ekonomikas attīstības pārskats, 2023).

As to the further development of the economy, it depends on the situation in the external environment, as well as on the progress of initiatives and reforms in all key national sectors. All sectors have a certain economic impact and the assessment of the economic contribution of each specific sector is measured in terms of value added, which is calculated as the difference between the revenues generated by the industry and the cost of the resources needed to generate these revenues. It is therefore an added value generated by the relevant sector.

A unique feature of the health, sport and fitness sector is its contribution not only to human health and fitness, but also its socio-economic added value. Lack of physical activity entails significant costs for the state and society. Understanding the wider socio-economic benefits that physical activity can bring, particular attention should be paid to healthcare and productivity, as they have a significant impact on the economy as a whole and, consequently, on national sectoral policies. However, it is also worth noting the significant personal benefits and improvements in the quality of life provided by regular physical activity.

Globally, estimates of savings in the healthcare sector provided by sports and fitness clubs, as well as productivity assessments in workplaces, are carried out using different methodologies. Savings in the healthcare sector are mainly based on relative risks and treatment costs of different diseases (Ding et al., 2016). In turn, the cost of a drop in productivity due to insufficient physical activity is measured by the number of working days lost due to absenteeism and sick leaves.

Examining these issues in the context of Latvia, the author refers to a significant study by Deloitte Research, which estimates that the health and fitness sector in Latvia generated direct added value of EUR 132.795 million in 2022. In

addition to the direct contribution to GDP, the sector supported an additional value added of EUR 70.912 million in its supply chain. The largest source of indirect value added was other commercial services, including legal services, marketing and security of the premises. The sector is also an important employer in relation to its size, which is characterised by a high share of part-time employment. The sector indirectly supported additional 3.3 thousand jobs.

From a socio-economic perspective, the author outlines two key aspects. First, studies show that physical activity improves human cognitive abilities, functionality, planning, speed of information processing, and concentration. It follows that lack of physical activity harms a person's cognitive ability and productivity while performing work duties, even if they are present at the workplace. An employee may be physically present but mentally incapable of productive work. Secondly, regular physical exercise brings a lot of health benefits, e.g. reduced risk of disease, including cardiovascular disease, stroke, hypertension, diabetes, dementia, as well as various forms of cancer. The disease factor entails significant costs for individuals and for the society as a whole, thus affecting every aspect of people's lives personally, socially and economically.

Based on data processing and analysis of the Laboratory of Statistical Research and Data Analysis of the University of Latvia, each physically inactive employee costs the Latvian economy EUR 814.21 per year. The total amount is EUR 41.5 million, which the state budget loses each year due to the decrease in productivity caused by the lack of physical activity. In addition, when looking at the impact on productivity, Latvia loses more than 966 904.291 working days each year due to physically inactive workers (sick leave or absenteeism). Based on the average GDP generated per employee per working day, the decrease in productivity caused by the lack of physical activity costs the Latvian economy 190 million euros. The low level of physical activity is also estimated to cost the healthcare system additional EUR 16.438 million to treat and care the aforementioned diseases associated with lack of physical activity (Deloitte Research, 2023).

### **Physical fitness of the employees of law enforcement agencies and its impact on Latvia's security**

In order to illustrate the overall situation and to highlight the problem mentioned above, the situation is most aptly characterised by the Latvian Health and Fitness Association: "If we do not solve the problem, then in 20 years we will run out of troops for the army, the police, and doctors. We already see that in military service a large number of new recruits lack adequate health condition and physical fitness" (LV portāls, 2023).

Increasing the professional training of the employees of the law enforcement institutions is in line with the direction envisaged in the National Security

Concept, i.e. that it is necessary to further strengthen the capacity of the law enforcement institutions by implementing appropriate human resources policies, including by investing in staff education and professional training (Nacionālās drošības koncepcija, 2019).

Thus, in order for the law enforcement authorities to be able to effectively ensure national and public security, professionally trained staff are needed. Professionalism as a criterion of competence is a complex issue that begins with the selection and enlisting of candidates, basic professional training of new recruits and promotion of professional qualifications (Indrikovs, 2004).

The duties of the police, border guards, army and other services involved in providing security require a high level of psychological and physical preparedness. The Occupational Standard lists specific competencies for performing their duties – good physical fitness, mental balance, adequate health condition, driver's licence. Officers are required to apply tactical methods of attack prevention and protection, to use special means and firearms, to apprehend offenders, etc. (Profesijas standarts, 2022).

Since the professional competence requirements applicable to the officers involved in ensuring security are set at the highest level, it is the duty of the government to create favourable conditions for the provision of professional training and further development of employees, so that they are able to maintain health and physical fitness at the required level for the service.

One aspect attesting to the relevance of the issue is the changes in the security environment over the past decade along with the existing threats and challenges that require the development of professional and well-trained police and army services, with high response capacities and preparedness to protect national and public security. It is equally important to take into account the fact that a number of deficiencies in the professional training have been identified in recent years, which have had an impact on the health condition and level of physical fitness of the law enforcement staff.

Over the past five years, the legislator has reduced the physical fitness requirements twice in Cabinet Regulation No. 288 “Physical fitness requirements for the officials of the Ministry of the Interior institutions and Prison Administration with special service ranks” (last amended on 18 October 2022, Latvijas Vēstnesis, 204, 20.10.2022), since for an extended period of time the recruitment to the interior sector institutions has revealed a high proportion of applicants who are unable to meet the requirements. These amendments were justified by the desire to attract motivated young people to the service, as a reaction to an acute staff shortage both in subordinate institutions of the Ministry of the Interior and in the Prison Administration. The vacancy rate reached 25-30 % in some units, which is likely to negatively impact the quality of the work performance and provision of services.



At the moment, there are no direct indications of the inability to recruit enough young people in the State Defence Service and the National Defence Academy due to their insufficient physical fitness, but as the Chief of the National Armed Forces Recruitment and Selection Centre Major Rihards Rozenbaums has said: “20-25 % of the young people who want to voluntarily join the State Defence Service are likely to fail the selection in the first draft due to health problems” (LETA, 2023).

These conclusions are not merely formal figures but should be regarded as rather serious risk factors. With the deterioration of physical fitness, not only the health condition, productivity, motivation and further education of the security officials suffer, but also the effectiveness of the entire sector may suffer considerable downturn. Undoubtedly, adequate service conditions and environment along with developed sports infrastructure constitute one of the cornerstones of the overall development of the interior and defence sectors. Therefore, in order to ensure the effectiveness of the law enforcement institutions and to develop the professional competences of their staff members, the author proposes more intensive implementation of concrete initiatives at the level of government, parliament, local authorities and institutions, involving all the necessary legal, practical and also political instruments.

### **Conclusion**

All over the world, in Europe, and the Baltic States, the lack of physical activity among all age groups is becoming an increasingly severe problem. With the decline in physical activity, all countries experience an increase in various diseases and conditions, a deterioration in physical health. Today, more and more old age-related diseases are becoming widespread among young people. At the same time, sports studies and sports medicine studies have shown that by properly and regularly performing various physical activities, each person has the opportunity to improve and strengthen their health, maintain high work performance, and agility for a long period.

It is also worth recalling that Latvia's growth and development is impossible without a sustainable and strategic sport policy, which in many respects largely depends on economic, social, legal and political aspects. By studying and analyzing the impact of insufficient physical activity on the national economy and security, the author managed to identify some of the most important problems in the sport sector and to propose the following potential solutions:

1. The concept of sport, which used to focus exclusively on high performance competitive sports, has become much wider today. The theoretical framework and interpretation of the concept of sport in legislation and among the responsible institutions is often different, even ambiguous. Therefore, it is important to reach an agreement on the framework for a modern definition of sport between the

parliament, government, and the responsible institutions, which corresponds to the different target groups of sport policy – children and young people, any individual engaged in physical activity, any individual who has an interest in sports and the related events, high-performance athletes, persons with disabilities, etc.

2. On the basis of the economic and social impact assessment, the author supports the proposal proposed by the Latvian Health and Fitness Association to amend the law “On Personal Income Tax” and the Cabinet Regulation No 336 “On Eligible Expenses for Education and Medical Services” to extend the amount of nontaxable personal income to EUR 600 per year, and the eligible expenses to include gym membership, swimming pool visits, participation in various sports exercises, participation in popular sports competitions, and other sport-related expenses.

These changes will improve the physical health, work performance, and overall well-being of the population. The healthcare system will also benefit by reducing the cost burden associated with the treatment of chronic diseases that can be prevented by engaging in physical activities. Likewise, the revenues in the state budget are expected to grow as a direct result of the health and fitness sector development, and indirectly from all the related economic sectors that have a positive impact on health and fitness sector support functions and the related investments.

## References

- Alfejeva, A. (2018). Sporta jēdziens un tā attiecināšana uz prāta spēlēm. *RSU elektroniskais juridisko zinātnisko rakstu žurnāls SOCRATES*, 2(11), 81.-89.
- Charness, G., & Gneezy, U. (2009). Incentives to Exercise. *Econometric*, 77(3), 909 - 933.
- Ding, D., Lawson, K. D., Kolbe-Alexander, T. L., Finkelstein, E. A., Katzmarzyk, P. T., Van Mechelen, W., & Pratt, M. (2016). The economic burden of physical inactivity: a global analysis of major non-communicable diseases. *The lancet*, 388(10051), 1311-1324.
- Economic Health & Societal Well-being: Quantifying the Impact of the Global Health & Fitness Sector Global Report. (2002). Deloitte, IHRSA, The Global Health & Fitness Alliance. Retrieved from: <https://www.ihrsa.org/publications/economic-health-societal-well-being-quantifying-the-impact-of-the-global-health-fitness-sector/>.
- Ekonomiskā veselība un sabiedrības labklājība: Globālās veselības un fitnesa nozares ietekmes kvantificēšana – Latvija. (2023). Deloitte, IHRSA, Latvijas Veselības un fitnesa asociācija, 1-58.
- Eurobarometer Report. (2022). Sport and Physical Activity. European Commission, 40. Retrieved from: <https://europa.eu/eurobarometer/surveys/detail/2668>.
- European Sports Charter (2021). Recommendation CM/Rec (2021) 5 of the Committee of Ministers to member States on the Revised European Sports Charter. Adopted by the Committee of Ministers on 13 October 2021 at the 1414th meeting of the Ministers' Deputies. Article 2.
- Hafner, M., Yerushalmi, E., Phillips, W.D., Pollard, J., Deshpande, A., Whitmore, M. Millard, F., Van Stolk, C&S. (2019). The economic benefits of a more physically active

- population: An international analysis. Santa Monica, CA: RAND Corporation. Retrieved from [https://www.rand.org/pubs/research\\_reports/RR4291.html](https://www.rand.org/pubs/research_reports/RR4291.html).
- Health at the Glance. OECD indicators. (2023). OECD, 20. Retrieved from: <https://www.oecd.org/health/health-at-a-glance/>.
- Iedzīvotāju zemā fiziskā aktivitāte negatīvi ietekmē Latvijas ekonomiku un drošību. (2023). LV portāls. Retrieved from: <https://lvportals.lv/norises/353091-iedzivotaju-zema-fiziska-aktivitate-negativi-ietekme-latvijas-ekonomiku-un-drosibu-2023>.
- IHRSA 2023 Global Report. (2023). Retrieved from: <https://www.ihrsa.org/publications/the-2023-ihrsa-global-report/#>
- Indrikovs, Z. (2004). Cilvēktiesības un profesionālisms policijas darbā. Cilvēktiesības un sabiedrības drošība: Starptautiskā zinātniski praktiskā konference. Rīga, LPA, 49.
- Latvijas ekonomikas attīstības pārskats (2023). Ekonomikas ministrija. ISSN 2661–5061, 10.-12. Retrieved from: <https://www.em.gov.lv/lv/media/18390/download?attachment>
- Latvijas izaugsmes modelis. Cilvēks pirmajā vietā. (2005). Apstiprināts ar Saeimas 2005.gada 26. oktobra lēmumu.
- Latvijas Nacionālās sporta padomes nolikums. (2003). MK noteikumi Nr.422. Latvijas Vēstnesis, 111, 06.08.2003.
- Militārā dienesta likums. (2002). Latvijas Vēstnesis, 91, 18.06.2002.; Latvijas Republikas Saeimas un Ministru Kabineta Ziņotājs, 14, 25.07.2002.
- Nacionālās drošības koncepcija. (2019). Latvijas Vēstnesis, 197, 27.09.2019.
- Oksleids, K. & Bolheimers, D. (2000). *Olimpiskās spēles*. Enciklopēdija. Zvaigzne ABC.
- Sporta likums. (2002). Latvijas Vēstnesis, 165, 13.11.2002.; Latvijas Republikas Saeimas un Ministru Kabineta Ziņotājs, 23, 12.12.2002.
- Sporta politikas pamatnostādnes 2022.–2027. gadam. (2022). Latvijas Vēstnesis, 107, 03.06.2022. OP numurs: 2022/107.7
- Task Force on Community Preventive Services. Recommendations to increase physical activity in communities. TFCPS. (2002). *Am J Prev Med.* 2002 May;22(4 Suppl):67-72.
- Valsts policijas vecākā virsnieka profesijas standarts. (2022). Profesionālās izglītības un nodarbinātības trīspusējās sadarbības apakšpadomes 2022.gada 14.decembra sēdē, protokols Nr.7