

SUSTAINABILITY OF SCIENTIFIC RESEARCH IN PHYSICAL EDUCATION AND SPORT

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Abstract. Given the importance of sustainable development at global level, the Declaration on the Promotion of Sustainable Science was adopted in 2000 in Frieberg (Sweden), according to which: the substantial increase of government accountability, stronger awareness of citizens, development of long-term interdisciplinary research, involvement of scientists, practitioners in setting priorities, creating new scientific knowledge, assessing possible consequences and testing them in practice have been generated. A significant role in the development of physical education and sport field has the scientific research, but its realization has the effect of developing a creative activity. Therefore, it is necessary that students' orientation to become a compulsory activity in scientific activity, as it can generate new constructive ideas, progress, competitiveness and sustainable development. The scientific research feeds education, but education makes the science move from one generation to another, and to strengthen. This is beneficial for society through the development of know-how (knowledge) fund. The main issue of scientific research is the efficiency. Achieving sporting performance in a limited time, with high efficiency and minimal biological risk has led to a significant development of scientific research specific to the field of sport, but also to a greater receptivity regarding knowledge transfers and applications in other fields.

Introduction. The higher education institution of physical education and sport comprises in its market structure its knowledge and its main activities focusing on creation, acquisition, use, learning, integration and valorisation in order to achieve economic and social performance. Thus, we can state that the higher education institution is a sustainable entity, because on the basis of an economically, ecologically and socially balanced approach it capitalizes on a higher level the knowledge and other resources at its disposal and attracts, generating efficiency and multidimensional performance, validated by the market and recognized by the society. The World Commission for Environment and Development of United Nations, headed by Gro Harlem Brundtland, Norway's Prime Minister, introduced in 1987 a new concept on environmental and social issues: "Sustainability (as sustainable development) is development that meets the currently needs without compromising the possibility of future generations to meet their own needs" (UN, 1987). In this definition, often quoted, the idea arises that the natural environment faces stress factors and over-exploitation and cannot meet indefinitely the growing needs of people. Moreover, for each aspect of human life, sustainability occurs at the intersection of the three basic components that have been called "pillars" of sustainable development: society, the environment and the economy (Figure 1).

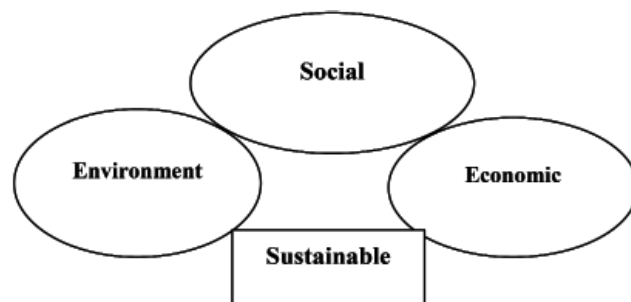


Fig. 1. Scheme of sustainable development at the confluence of the three constituent parts

Source: UCN 2006, *The Future of Sustainability.*

Rethinking Environment and

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According to the specialized literature, the concept of sustainability is a complex approach that is spoken at a time when environmental problems caused by different human activities require urgent and serious solutions. In defining the concept of sustainability, it is important to identify and address the issues of equity and social responsibility, as without them there can be no sustainable institutions.

The notion of sustainability and its derivatives fall into the group of complex key concepts that, like equality, freedom, democracy, etc., are the subject of continuing scientific debates on the definition, the scope and the extent to which they can be achieved in economic and social practice.

Regarding the concept of sustainability for the activity specific to the academic network, it is necessary to specify the following:

Sustainable development is centred on the individual in the sense of improving the quality of human life;

Sustainable development is a normative concept that includes standards of judgment and behavior in order to be respected.

In this context, we can define sustainability as a defining feature of the knowledge-based organization (in this case, the higher education institution of physical education and sports), having the ability to function and achieve performance over a long period of time.

With regard to the sustainability of scientific research in physical education and sport, it is important to reflect some requirements in this direction:

- *integrating the sustainability of scientific research* in the field requires a rethinking of the academic mission, involving the entire scientific-teaching staff of the university, students, researchers and orientation towards reforming the goals and objectives of the institution and of the research programs, with their reflection in a development strategy for at least five years, accepted and approved at the level of the entire academic community;

- *developing research directions in the field of physical education and sport* and their continued use so as to generate useful assumptions about the aspects and characteristics of sustainability that increase the scientific and educational potential from an emancipatory perspective;

- *the sustainability of scientific research in physical education and sport* is related to the social, sporting, pedagogic, cultural, economic, legal, ethical, competitive etc. field, and differs in time and space and can be debated at different reference levels;

- *inclusion of aspects of sustainability in scientific research in physical education and sports* depends largely on organizational culture, being closely linked to the history of the higher education institution and its investigative tradition.

The aim of the research is to identify the integrated system of measurable indicators that set out the activities necessary to ensure the sustainability of scientific research in the field of physical education and sport.

The research methodology has been selected to respond to the main requirements specific to an ascertaining study. Methods used in research: literature analysis; the self-observation method; the method of systematic observation and the method of analyzing the products of the scientific research activity.

The model of the integrated system will be quantified by the output and outcome indicators of the scientific research in the field of physical education and sport.

In order to meet the regional requirements and the connection between the university, the sports and the economic environment, within the scientific laboratories organized by the higher education institution of physical education and sport, by financing the scientific research (through projects and grants), services will be provided to the agents interested economic operators and national sports institutions, training and counseling activities will be organized for the specialized personnel in the field.

The sustainability of scientific research in the field of physical education and sport is justified by the following activities - Figure 2:

- a) *transferability* - the scientific research in the reference field includes activities that allow the continuation and valorization of the scientific results after their finalization and publication;

- b) *integrated approach* - by continuing the functioning of the structures that ensure the realization of the scientific research in the field and after the completion of the scientific projects (won and fulfilled), financially and institutionally;

- c) *continuation of the activities* by submitting other projects with clearly defined objectives by some of the partners;

- d) *maintaining and developing* the doctoral and postdoctoral research network in the accredited field.

The reconstruction of scientific research in the field of physical education and sports implies the understanding of the dynamics of scientific research structures and the development of indicators to monitor their evolution in order to ensure its sustainability. In Figure 2 we present the integrated system of measurable indicators that determine the accomplished activities in order to ensure the sustainability of the scientific research in the field of physical education and sport.

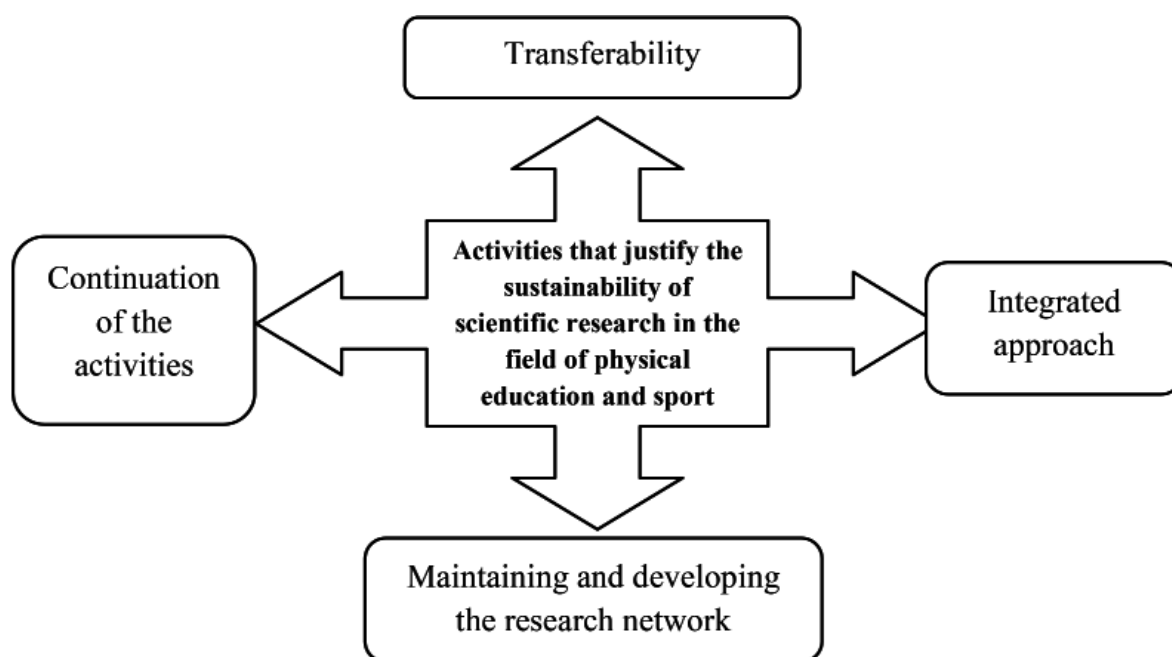


Fig. 2. Activities that justify the sustainability of scientific research in the field of physical education and sport

The durable, sustainable development of scientific research in the field of physical education and sport implies the fulfillment of an agenda geared to the specifics of society, namely its' moving at a rapid pace towards positive change. Thus, the higher education institution of physical education and sport is responsible for the realization of the national and international connection in order to ensure mutual support and to act operative towards the consolidation of the relations with the business environment, with the local communities, with the civil society, with the sports environment, with the government and other stakeholders in promoting sustainability.

The professional experience accumulated by academies and higher education institutions in developed countries is based on research, learning, leadership and change in spiritual sustainability.

In **conclusion**, we can mention that the integrated approach of scientific research for durable, sustainable development in the field of physical education and sport can contribute to the continuous improvement of life quality in society. Also, it is necessary to identify the most efficient partners who can provide the experience, models of good practices, guidance and assistance during the sustainable development process of the higher education institution. A special place in this re-

gard is the collaboration with the business community, the central and local public authorities, the sports organizations, the local communities, as well as the sports athletes who have completed their sports career together with other people interested in national sports development. At the same time, the higher education institution of physical education and sport plays an important role in this respect, as this is the only provider of knowledge and research in the field, representing in fact the opportunity and the consequence, the problem and the solution at the same time. The higher education institution for physical education and sport can make the country more competitive, providing support for the sustainable development of sport, based on knowledge and research, by developing the skills, competencies and qualities required for economic productivity and social growth. Moreover, the social responsibility of the academic institution in question must be oriented towards the transformation of society into a sustainable society.



Fig. 3. The integrated system of measurable indicators for ensuring the sustainability of scientific research in the field of physical education and sport

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