

1.1 Institute Data and Description

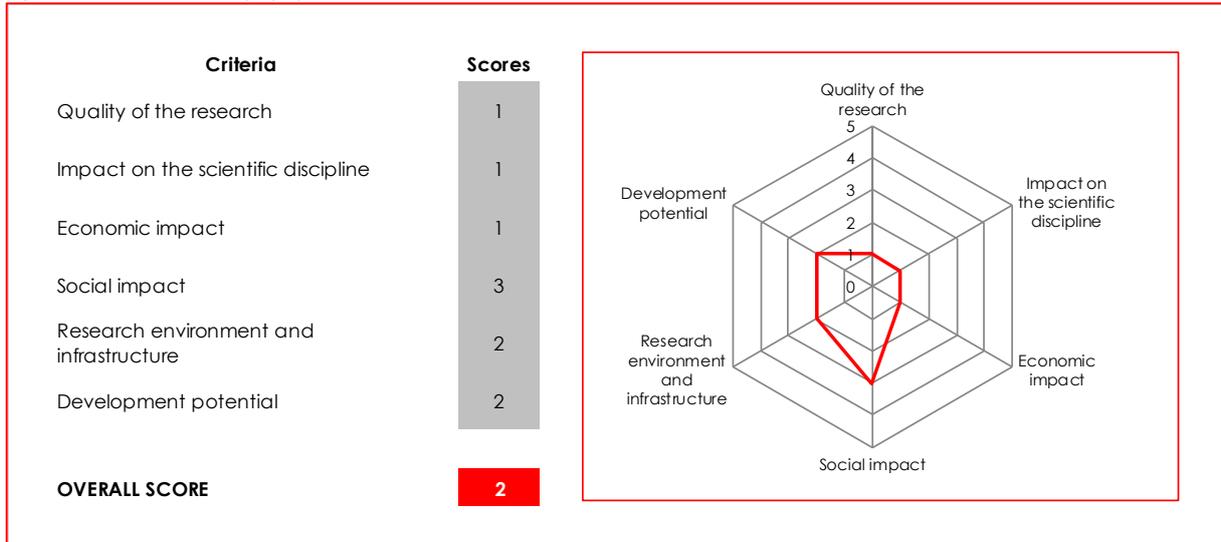
Latvian Academy of Sport Education (LASE)	
Primary field of science	Medical and health sciences
Corresponding fields of science	Educational sciences Other social sciences – sports sciences
Related fields of science	Health sciences Other social sciences – adapted physical education
No. FTE academic personnel 2018	42
No. FTE academic research personnel 2018	11
Total number of FTE academic and research personnel 2018	53
Articles in peer reviewed scientific edited journals and conference proceedings <u>included</u> in WoS or SCOPUS in period 2013-2018	54
Articles in peer reviewed scientific edited journals and conference proceedings <u>not included</u> in WoS or SCOPUS in period 2013-2018	99
Monographs in period 2013-2018	12
Patents Latvian in period 2013-2018	3
Patents (Europe and international) in period 2013-2018	0
Total no. of self-reported outputs in period 2013-2018	168
No. of WoS or Scopus outputs in period 2013-2018 per researcher in 2018	1.02
No. of all outputs in period 2013-2018 per researcher in 2018	3.17
No of PhDs completed in period 2013-2018	12
No. of PhDs in period 2013-2018 per researcher in 2018	0.23
Total funding in period 2013 -2018 (Euros)	1,891,371
Total funding in period 2013-2018 per researcher in 2018 (Euros)	35,686

The Latvian Academy of Sport Education (LASE) is a specialist academic and professional state higher education and science institution and its main focus is on education and training. It is the only institution of sport science, exercise and health in Latvia with a large number of academic staff that has been providing the physical education and coaching courses in Latvia and the sport science support for Olympic sports. The four key scientific research directions of LASE are a) Sport, sport education and socialization, b) Promotion of public health – physical activity as a means of preventing non-communicable illnesses in people of various ages, c) High achievement sport and d) the socio-economic aspects of sport.

1.2 Expert Panel evaluation

The figure below presents the scores assigned by the Expert Panel in Medicine and Health Sciences to the Latvian Academy of Sport Education (LASE).

Figure 1 Latvian Academy of Sport Education – Scores



Overall score

Score: 2 – adequate level of research

The overall score awarded is 2 to indicate an adequate level of research conducted at LASE. It has been making progress in improving the research infrastructure and facilities through some diligent and focused investment of European structural funding and an organisational re-structuring of research units and laboratories and the launch of a new research centre. This is recognised by the award of a score of 2 for the quality of research environment and infrastructure. The quality of research outputs is still at national level and a greater effort is required to build on progress and improve the quality of the research conducted and the impact of the work. To recognise the potential of the Academy the panel awarded a score of 2 for development potential and it is important that the Latvian State support the further development of this institution as the social impact of the work on sport, health and physical activity are very important for society and this is recognised by the award of 3 for Social Impact.

Quality of Research

Score: 1 - poor

The overall quality of the profile of the research by the institution is expressly national and although there were increases in PhD completions, participation in conferences and external collaborations since the last evaluation, the research output quality requires further improvement to reach international standards. Research by the institution contains few significant new scientific discoveries in sport sciences, exercise and physical activity and some notable results are only published sporadically. The institution is involved in a limited number of significant or major international debates of the scientific community. It focuses mainly on introducing regional and some international research trends in Latvia. The publications are mainly in local and regional journals with no contributions to high quality international journals. A clear indication of this limited contribution to the international research knowledge base is the fact that 6 out of the 14 (43%) of the key publications published after 2013 and listed in the self-assessment (Section 3.3: most important/impactful publications by academic personnel and researchers) are conference presentations in local or regional conferences and not full research papers in international journals. There are some collaborations with other local and regional universities in more recent years but these activities are mainly focused on teaching and educational aspects with no major contributions to the research performance of the institution. Although the lack of basic state funding is a key factor in the quality of the research performance, the institution has a large number of academic staff that have limited or no notable research outputs. The evaluation of the institution in the global research environment in the self-assessment report has a very local context only and does not consider the international position of the institute. For example, there are now academic quality rankings for Sport Science departments worldwide with

372 universities and some 400 sport-related units that are selected and ranked.¹ The Sport Science universities/departments are ranked by several indicators of research performance, including papers indexed in Web of Science, total citations, citations per paper, papers published in top 25% journals, and percentage of internationally collaborated papers. The Lithuanian Sports University, and University of Tartu units are ranked in the positions between 201-300, but LASE is not listed at all in these subject-specific rankings of academic research quality in Sport Sciences.

Impact on the scientific discipline

Score: 1 - poor

The institution continues to be very active in the promotion of sport science within Latvia through successful collaborations with Olympic Sport Associations and within the Baltic States as a key player in the Baltic Sport Science Society conferences. However, the impact of the research at an international level continues to be fundamentally limited as indicated by the low number of international level research outputs and their limited citations. The impact of the research by the institution has improved over recent years but remains overall limited and the institution is not as a strong national player compared to other universities in similar fields in the wider health science areas. The publishing strategy and scientific impact of the institution's research work are predominantly geared towards the national scientific community and have limited impact at the international level. The impact of LASE on supporting Olympic sports and athletes should be extended to other important areas of national science, technology and innovation development policy, as well as education development policy. The focus should continue to be not only on competitive sports but to specific contributions or impact in other important areas such as sport development and physical activity interventions through interdisciplinary collaborations with other relevant university units in Latvia that add specific value and benefits for society and health.

Economic impact

Score: 1 - poor

The institution is working on some important economic sector areas such as sport, physical activity and health but there is only limited evidence that the economic impact of the research is relevant to economic actors (with a particular focus on the national economy) and there are no significant interactions with the non-academic or industrial sectors. The subject area of the institution is important for the economy in general but the research work is not making any tangible and significant contributions to economic impact. There are some interactions of the institution with the private sector for the provision of services (e.g. Olympic Sports athletes and physical condition of airline pilots) and links with some local equipment manufacturers but significant links with the industrial sector in sport, exercise and health sciences are yet to be established.

Social impact

Score: 3 - good

The subject area of the institution and research are very important for the health and wellbeing of Latvian Society. There are interactions with other European institutions for various projects (e.g. VSPORT+, EUPAS-MOS), participation in various EU expert groups (e.g. Human Resources Development and Skills and Human Resources Development in Sport XG HR, Health-enhancing Physical Activity XG-HEPA) and cooperation with a large number of Latvian sports federations, local governments, sports clubs, Olympic centres, and other relevant sport organisations. These are mostly implemented via student research projects and student practice placements and seminars and conferences for the education and professional development of coaches, teachers and sport managers. The overall level of interactions of the institution with the public sector and the public are at a level expected of recognised academic institutions.

Research environment and infrastructure

Score: 2 – adequate

¹ For example: <http://www.shanghairanking.com/Special-Focus-Institution-Ranking/Sport-Science-Schools-and-Departments-2018.html>

The long-term research strategy to enhance the quality of scientific research and innovation is very clear and includes 16 objectives that are appropriate and relevant. The human resource development strategy includes relevant actions for promotion of doctoral researchers to academic staff, renewal and succession planning of ageing academic staff and development of opportunities for the attraction of outstanding young scientists. However the teaching load of staff is high which reduces the time available to focus on research. There has been recent investment through ERDF structural funds and there has been a very notable improvement in research infrastructure with new and modern laboratories and scientific equipment installed that allow kinematic, biomechanical and electromyographic analysis of human movement. Although these improvements as part of the LASE modernisation strategy provide a strong basis for future developments, there is no clear description of the management structure for research in LASE as a whole or within the research laboratories and the mapping or alignment of the four key LASE research directions to the structure of two units comprising a new research centre (HCSRC) and the scientific laboratories is not clearly apparent. The availability and quality of support services and technical staff is not described in detail. Overall, the research environment and infrastructure of the institution are improving but they are still not comparable to other national and international units in similar areas in Health Sciences in Latvia or Sport, Exercise and Physical Activity internationally. The institution's research environment is still evolving to achieve a level that is expected in the international scientific community of a respected institution in the given discipline and despite the improvement in the research environment and infrastructure the research outputs are mainly based on basic descriptive research work that is not comparable to higher national or international standards.

Development potential

Score: 2 – adequate

LASE has the potential to become a strong national player in the scientific areas of sport, physical activity and health. The institution's future strategy is detailed and appropriate and based on a realistic assessment of its strengths and weaknesses, opportunities and threats that mainly relate to lack of financial support and incentives to attract promising young scientists to the area, especially given the ageing of the active scientific staff. The ability to attract students, doctoral candidates, and foreign researchers and to raise funding that is awarded competitively are quite limited but the four main LASE research themes and directions are orientated towards topical issues in sport and physical activity. The institution is capable of being a visible local player in its area of research, which can be expected to contribute to the activities of the international scientific community. The development requires continued funding which is a weakness and a threat given the lack of basic state funding and the limited external research funding. The expertise of the Academy is very relevant to many other sectors (industrial, health, etc), so collaborations beyond sport sciences should be established and fostered especially with other relevant units in Latvian universities.

Potential to offer doctoral studies

LASE already awards PhDs (most, in the assessment period, were to their own teaching staff) but, as described above, the quality of the research currently is low and the ability to support and award high quality PhDs is dependent on improved research quality. Nevertheless, there is the potential to offer improved doctoral studies in future. There are plans for a doctoral programme in collaboration with other regional institutions within the framework of the Baltic Sport Science Association. Collaboration with other local universities in Riga that have more experience in doctoral programmes and offer doctoral training and support will be a distinct advantage and will benefit closer links of LASE PhD researchers with a larger community of postgraduate students.

Alignment with Smart Specialisation Strategies

The Latvian Academy of Sport Education has identified potential contributions to some investment priorities of the Smart Specialisation Strategy, namely Modern Education through the promotion of physical activity and increased use of alternative transportation to work by using environmentally friendly modalities such as walking or cycling and reducing car usage. The provision of a modern education system in sport and health is also an area where the Academy can make a valuable contribution. Throughout the world these days the notion that 'Exercise is Medicine' is now accepted as an important element of public health education and interventions to enhance quality of life and wellbeing in the normal population and as people age and help in the prevention and

management of obesity and other chronic diseases. Sports Science also has the potential to contribute to technological products and ICT solutions and developments for monitoring physical activity, training and performance. LASE has the potential to contribute to all these areas, but the link is currently rather tenuous as they have limited links with medical schools, engineering and ICT departments and industrial partners so further important contributions to RIS3 are possible but will require a more specific and focused strategy and action plan for these developments that must be embedded in the overall strategic plans of LASE.

Conformity with state scientific and technology development

The Latvian Academy of Sport Education has the potential to contribute to Scientific and Technological Development Innovation actions as explained above based on the Smart Specialisation Strategy priorities and specialisation areas and in particular to public health which is one of the priority directions in science for the period 2018-2021 as well as Modern Education and ICT in the sport technologies areas. However, this potential requires better links and cooperation with the industrial and technology transfer sectors and collaborations with other relevant universities and units in the Latvian Higher Education sector as part of a more ambitious, purposeful, resolute and focused LASE research and impact strategy.

Recommendations

- The research vision and strategy is rather generic but includes a large number of appropriate general objectives, but the leadership and operational management and processes of the structures must be defined clearly and linked to or aligned with the four identified key research directions to ensure the strategy can be, and is, implemented.
- The research structures (research centre and scientific laboratories) need to be aligned better with the four main research directions with a research team headed by a research leader in each of the four key research directions. Each research team in the four areas need to devise a detailed research plan covering the next five years with the main vision and directions of research in these areas and specific targets for research work, funding and collaborations and by considering the general research objectives identified in the LASE research strategy. The research plans in each area need to identify Key Performance Indicators (KPIs) such that are achievable and measurable that must be monitored and evaluated before the next assessment. These can include for example numbers of submissions and publications of papers to high quality recognised international sport science journals (Q1 or Q2 level sport science journals), numbers of submissions and grants to national and international funding organisations, numbers of papers and grants with international collaborators etc.
- LASE researchers must target high quality (Q1 or Q2) sports science journals for both forming research priorities in the Academy and publishing research in these journals that include a number of journals in psychology, sociology, physical education and pedagogy as well as natural sciences in sport sciences such as Physiology, Biomechanics, Sports Medicine etc. The list of Sport Sciences journals and their quality rankings (Q1-Q4) are listed in a number of links, for example: https://www.scimagojr.com/journalrank.php?category=3699&page=1&total_size=125
- The amount of effort and time to produce its own journal is appreciated but the focus in such a local journal detracts from the efforts to target internationally recognised high-quality journals and improve research quality.
- The impact of LASE's research can be increased by extending its focus from supporting competitive sports and athletes to other important areas of national science, technology and innovation development policy, as well as education development policy – such as wider sport development and physical activity interventions through interdisciplinary collaborations with other relevant university units in Latvia that add specific value and benefits for society and health.
- Although the Academy expressed a strong preference to remain an independent higher education institution, the Panel's view is that a merger or stronger formal links with one of the main universities will improve the research environment, the research management and governance and the research potential and quality in general. Therefore, the Panel recommends that these options are given serious consideration by the Academy and the Ministry

- The teaching load of academic staff must be reduced by consolidation or revision of the curriculum and support for staff to be involved in research teams and devise personal research plans that align with the general research objectives and are based on collaborative work with other researchers in LASE and the other universities in Latvia.
- Academic staff and doctoral students will benefit from a researcher development programme that will enhance their research skills and abilities. Although this is difficult to develop and manage in an independent institution, other institutions in Latvia have such programmes and LASE can collaborate with them to provide generic research support and development opportunities to its doctoral students and staff. Even if the Academy remains independent, closer links and collaboration with local universities will enhance its research potential and development.
 - External funding from competitive sources must be targeted but this requires planning and support for staff to develop high quality grant proposals. This is difficult to achieve without a strong academic profile so local and international collaborations are necessary for involvement in high quality grant proposals to national, regional and European sources that will be difficult to target successfully in isolation and independently without collaborations.