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TECHNICAL FILE

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01

EDITORIAL

We are in the end of the calendar year; it is important to start the balance of our activities. Researchers should seek to make their annual report in accordance with LQRC-CIEQV regulations.

In its activities, LQRC-CIEQV has boosted several scientific sessions and open laboratories during Science and Technology Week (22-25 November), with an active participation in the Polytechnic Institutes of Santarém, Leiria and Setúbal. We thank the total institutional collaboration of the schools' directors and the institutes presidents.

We held the meeting of the LQRC-CIEQV Scientific Council, on November 22, where we approved the activity plan for 2023 and the integration of new members. 68 doctoral members and 18 doctoral students are currently integrated on LQRC-CIEQV. The election of the LQRC-CIEQV coordinators was also marked for June 27, 2023.

The 2nd LQRC-CIEQV International Congress accepted 98 communications in the various scientific areas. The registration period is now open to participate in Congress (<https://www.cieqv.pt/2nd-international-congress/registations/>). We recall that Congress will take place at the School of Education and Social Sciences, of the Polytechnic Institute of Leiria, on February 23 and 24, 2023.

November Newsletter presents some of the research and projects done by members of the scientific area of Physical Activity and Healthy Lifestyles. The studies "Quality of Life of Fitness Professionals in Portugal: Comparative and Correlation Study" and "Comparison Between Olympic Weightlifting Lifts and Derivatives for External Load and Fatigue Monitoring" reflect the field diversity and ever present multidisciplinary when the citizens quality of life is final objective, whether the physical exercise technicians or in the Olympic athletes.

In the interview with researcher Félix Romero, some of the objectives and projects that are under development are pointed out, in particular, those that are related to the school sports for young people. The interview with researcher Susana Alves directs us to another sense, that is the physical activity with intervention programs in the community. These are some of the good examples of societal impact of LQRC-CIEQV investigation.

This newsletter is very rich in information about research projects associated with advanced doctoral education. Also are identified some funded projects, with national and international partnerships: – Promotion of Physical Activity and Health: Community Intervention Program Active (Mind); – New Health “Lifestyle as Medicine”; – “Mathematicactive”; – Effects of Exercise – Resistance Training and Walking – on an older population; – “Giving life to the years” and “Active age”; – Physical Exercise and Cognition in Elderly People.

For all this, it is an excellent opportunity for a careful reading of this newsletter number, which highlights the excellent production of the scientific area of Physical Activity and Healthy Lifestyles.



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Expertise related to UN Sustainable Development Goals:

In 2015, UN member states agreed to 17 global Sustainable Development Goals (SDGs) to end poverty, protect the planet and ensure prosperity for all. **This research works** contributes towards the following SDG(s):



02

ARTICLE #1

— Quality of Life of Fitness Professionals in Portugal: Comparative and Correlation Study



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Fitness has been positively associated with quality of life (QoL). This positive association has been reported in general QoL and in different domains (physical, psychological, social, and environmental), with different populations. Fitness professionals (FP), through their intervention, contribute to the improvement of the QoL of their clients, however, few studies have been found about the QoL of FP.

FP are exposed to certain factors that may have a negative influence on their QoL, and some of them are related to the work context. Lower levels of job satisfaction could interfere with physical and mental health, QoL, stress, self-esteem, and individual life (Faragher et al., 2005). Job satisfaction's lowest levels of FPs in Portugal are regarding salary, opportunities for promotion, and stability at work (Ramos et al., 2021a). In Portugal, most FP are independent workers, and have a mean net salary between €631,98 and €842,63, even considering that most of them have a bachelor's degree or higher (Ramos et al., 2021b). The physical demands of the FP work in relation to the type of exercise, mechanical workload, total time of exercise load, and/or insufficient time for recovery, could also represent a work-related risk factor for QoL, especially for the physical domain. Many studies highlight the physical musculoskeletal problems (MEP) of group classes (GC) FP, and this can represent a concern because the most performed functions by FP in Portugal are directly related to exercise, with GC at the top of the list (Ramos et al., 2021b).

This research is important to better understand the impact of sociodemographic and work-related variables on FP QoL, with the purpose of defining recommendations that can improve the constraints related to the lower scores of QoL and ensure sustainable growth of the fitness industry. That said, the aims of this study were to (1) verify the indices of QoL of the FPs in Portugal, (2) compare the FPs' QoL indices concerning gender, marital status, professional title, and educational qualification groups, and (3) correlate the FPs' QoL indices with age, number of children, professional experience (years), number of GC/week, cardio GC/week, strength GC/week, mixed GC/week, body&mind GC/week, maximal GC/day, paid working and unpaid working hours/week, monthly net salary, and annual expenses related to the profession.

A total of 388 FP answered an online survey about QoL, sociodemographic, and work-related variables. The Portuguese version of the World Health Organization WHOQOL-Bref QoL Assessment (WHOQOL-Bref) was the instrument used for QoL data. For statistical treatment was used the SPSS program, version 27.0.1. Descriptive statistics, using central tendency (mean) and dispersion (standard deviation) measures, were applied to QoL, previously converted to the 100-point scale, and to quantitative sociodemographic and work-related variables. For characterization of qualitative variables was used frequency analysis. On group comparison, the T-test was applied to dichotomic variables and ANOVA when in a presence of more than two groups (complemented with Tukey's or Games-Howell post hoc). The resource for Kruskal-Wallis non-parametric statistic test was needed for the variable with more than two groups, that did not have a normal distribution (complemented with Bonferroni post hoc). The effect size was calculated for all comparisons. To correlate QoL scores with other variables Pearson's correlation coefficient was used for scale variables and Spearman association for ordinal variables. The level of significance adopted was $p < 0.05$.

The results reveal that some of the FP in Portugal have average levels of QoL, considering the mean and standard deviation. QoL indices results of the present study are similar to the results of the Portuguese working population but lower than other countries (Ferreira and Santana, 2003). The lowest score of QoL was verified in the environment domain, and this was also the domain that reveal the highest number of significant relations/associations. The environment is the domain that covers job satisfaction variables such as salary and promotion opportunities. Comparison results between groups suggest that being a male, married, and having a master's degree or higher were the characteristics with better indices of QoL. Age, professional experience, and net salary reveal a positive relation/association with QoL, and body&mind GC/week, maximal GC/day, unpaid working hours/week, and annual expenses related to work reveal a negative relation/association. Unpaid working hours/week was the only variable that had a significant relation with OQoLGH and all domains. In the present study,

the maximal GP/day revealed a bigger impact on QoL than the number of GC/week, and these results may increase the importance of respecting the training recovery time. Contrary to what was expected, once the high prevalence of MEP in the FPs is usually related/associated with high impact, intense, or repetitive movements GC, body&mind GC/week was the only type of GC related to the physical domain. The analysis of this unexpected negative relation raises the hypothesis that FPs with lower indices of QoL in the physical domain direct their intervention to the instruction of GC with less mechanical loading, like body&mind GC. Therefore, these results could be an indicator of the FP adaptation that allows them to remain in the profession. No significant differences were found between groups considering the professional title, and no significant relations between QoL and the number of GP/week, cardio GP/week, strength GP/week, mixed GP/week, and paid working hours/week. There is a possibility that the FP with the lowest indices of QoL have been dropped out of the profession, suggesting the need for the fitness industry to contemplate some changes in the FP working conditions.

More research is needed about FPs QoL, considering the remaining doubts. The interest in minimizing the number of FP dropouts from the profession, the important role that FP represents in the fitness industry recovery after COVID-19 pandemic, and in the promotion of physical activity to a better QoL of fitness industry clients, represents an encouragement for the continuity research on this topic.

The present study is available at [Frontiers | Quality of life of fitness professionals in Portugal: Comparative and correlation study \(frontiersin.org\)](https://www.frontiersin.org/articles/10.3389/fpsyg.2022.958063).

Vieira, I.; Esteves, D.; Ramos, L.; Simões, V.; Franco, S. (2022). Quality of life of fitness professionals in Portugal: comparative and correlation study. *Front. Psychol.* 13:958063, 1-13. [doi:10.3389/fpsyg.2022.958063](https://doi.org/10.3389/fpsyg.2022.958063)

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03

ARTICLE #2

— Comparison between Olympic Weightlifting Lifts and Derivatives for External Load and Fatigue Monitoring



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Abstract

Load management is an extremely important subject in the control of fatigue and adaptation process in almost all sports. In Olympic Weightlifting (OW), some of the load variables are known, namely intensity and volume. However, the type of exercise remains unknown in specific terms because empiricism tells us that some exercises induce greater fatigue than others, nonetheless we do not know specifically the value for this quantification. Thus, this work intended to evaluate the amount of fatigue caused by various types of OW exercises. We resorted to an experimental quantitative design, where we induced fatigue in adult individuals with weightlifting experience of at least 2 years, through the execution of a set of 10 of the most used exercises in OW, in which the volume and intensity between them were equalized (4 sets of 3 repetitions at 60% 1 repetition maximum), after which a Snatch Pull test was performed and changes in maximum and medium velocity, range of motion and medium power were evaluated as fatigue measurement, between before and after the protocol of each exercise through the linear transducer Vitruve (Vitruve encoder; Madrid, Spain).

Nine women and twelve men have participated in the study (age, 29.67 ± 5.74 years and 28.17 ± 5.06 years; height, 158.78 ± 6.70 cm and 174.50 ± 6.07 cm; body weight, 60.84 ± 7.34 kg and 79.46 ± 5.32 kg; %body fat, 17.76 ± 7.63 % and 16.98 ± 5.14 %, respectively). For the total sample,

significant differences were found in the range of motion (ROM) of Snatch Pull, Snatch and Back Squat ($p < 0.001$ and Effect Size (ES)=0.986; $p = 0.003$ and ES=0.731; $p = 0.021$ and ES=0.547, respectively) and also on Clean & Jerk (C&J) ROM ($p = 0.015$ and ES=0.582), in the mean power variable, significant differences were found in Power Snatch, Snatch, Snatch Pull and Back Squat and C&J ($p = 0.043$ and ES=0.472; $p = 0.048$ and ES=0.460; $p = 0.003$ and ES=0.729; $p = 0.009$ and ES=0.636 ; $p = 0.037$ and ES=0.488, respectively), in peak velocity, significant differences were found in Power Snatch, Snatch, Snatch Pull and Back Squat ($p = 0.008$ and ES=0.638; $p < 0.001$ and ES=0.998; $p < 0.001$ and ES=0.906; $p < 0.001$ and ES=0.906, respectively), in the mean velocity variable, significant differences were found in Snatch Pull and Back Squat ($p = 0.030$ and ES=0.509; $p = 0.003$ and ES=0.727, respectively). When genders were analysed separately, on the female group, significant differences were noticed in Snatch ROM, Snatch Pull and Back Squat ($p = 0.006$ and ES=1.218; $p = 0.001$ and ES=1.776; $p = 0.002$ and ES=1.474, respectively), in the mean power variable, significant differences were found in Snatch, Snatch Pull and Back Squat ($p = 0.006$ and ES=1.227; $p = 0.002$ and ES=1.512 ; $p = 0.001$ and ES=1.679, respectively), at peak velocity significant differences were revealed in Snatch, Snatch Pull and Back Squat ($p = 0.002$ and ES=1.469; $p = 0.005$ and ES=1.258; $p < 0.001$ and ES=2.058, respectively), for the mean velocity variable, significant differences were found in Snatch, Snatch Pull and Back Squat ($p = 0.006$ and ES=1.228; $p = 0.003$ and ES=1.372 ; $p = 0.001$ and ES=1.660, respectively). In the male group, differences were found in the ROM of Snatch Pull, C&J and Clean ($p = 0.042$ and ES=0.663; $p = 0.004$ and ES=1.033; $p = 0.020$ and ES=0.786, respectively) also, significant differences in mean power were only found in C&J ($p = 0.009$ and ES=0.910, at peak velocity were revealed significant differences in Power Snatch, Snatch and Snatch Pull ($p = 0.009$ and ES=0.910; $p = 0.025$ and ES=0.745; $p = 0.039$ and ES=0.675, respectively), the mean velocity showed significant differences only in the C&J ($p = 0.011$ and ES=0.876). This intervention confirmed the study hypothesis that when volume and intensity are equated, there are differences between fatigue induced by various OW exercises.

In Snatch derivatives, peak velocity showed to be a good variable to quantify fatigue in both genders while all other variables only showed to be sensible in females. In addition, females seem more sensible to fatigue in Snatch derivatives. Snatch derivatives are well known for its velocity developing capability, therefore, fatigue may be explained more effectively, by a test that mimics the movement itself such as the SPT.

In C&J derivatives, females did not present statistically significant results, therefore they showed that more volume and or intensity are needed to induce measurable fatigue. Regarding the male group, ROM seems to be the variable that we can better rely on and in addition, C&J derivative exercises are less velocity dependent, and this could explain the ROM capability to quantify fatigue.

The ten exercises studied showed different external load and fatigue levels between them. However, it was not possible to quantify the magnitude of the different variables. This is likely the consequence of individual physiological adaptation and responses to exercise. Coaches may plan according to these findings, namely, as to C&J variables, by using higher relative load on the exercises where fatigue was not found. Furthermore, using peak velocity in the Snatch and its derivatives plus ROM in the C&J and its derivatives seem to be best for training control in OW.

Keywords: Olympic Weightlifting; Fatigue; Clean & Jerk; Snatch; Squat; weightlifting derivatives.

04

INTERVIEW #1

— Interview with Félix Romero



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² Life Quality Research Centre

Brief curricular presentation

Master in Sports Training Management.

PhD in Methodological Foundations of Research in Physical and Sports Activities from the University of Lleida.

Post-Graduation in Data Analysis in Social Sciences at ISCTE – IUL.

Which is your main goal as a member of the LQRC-CIEQV?

LQRC-CIEQV provides the necessary leverage for the development of projects, either by facilitating the resources necessary for research and its dissemination, or through the institutional and personal contacts that it provides. At LQRC-CIEQV it was possible to set up a cohesive research team with elements with diverse valences that complement each other and with a solid experience in the field of Sport.

Which are your main research projects?

We are currently developing a project entitled “Bridging School Sport”. This work follows on from several works carried out within the scope of School Sports, which aimed to characterize this system in Portugal. Specifically, the project we have in hand aims to characterize School Sports in several countries with relevant experiences in children's and youth sports. The heterogeneity of systems among

the various countries is great, both in terms of the objectives of the practice and in terms of implementation methodologies, which are characterized by very strong cultural contexts. The aim is to study the different systems and identify a set of good practices that can be adapted and implemented in the Portuguese System. Particularly interesting is the relationship between the school system and the federated system. In Portugal these two systems only occasionally cooperate and thus lose their synergistic potential. Understanding how other countries, other systems, solve this problem could make an important contribution to future changes in the Portuguese System of School Sports.

The term “Bridging” assumes, therefore, two meanings: the first in relation to the School system/Federal System in each of the Countries; the second for a later phase of the project, in which it is intended to establish international cooperation in order to discuss children's and youth sports in Europe. The establishment of a consensus regarding the quantitative and qualitative goals to be achieved, the identification of good practices that result in a more diversified, more interesting school sport, with better quality of practice, could contribute to an improvement and standardization of school sports systems in Europe.

Knowing that knowledge should be transferred to society, how can the area of scientific research and professional intervention in which you are involved contribute to the union of theory and practice?

Although scientific knowledge does not necessarily have to have a practical application, I believe that for those who are dedicated to research in Applied Sciences, this objective is decisive. In this case, we work closely with the School Sports Coordinating Office. Cooperation with this office ranges from defining the topics to be addressed to sharing conclusions. This results in an immediate use of the information collected to improve the implemented system and consequently has an impact on the entire school community.

Considering that the LQRC-CIEQV promotes research on quality of life, what are the practical implications of its research?

The implications for improving the system are multiple and range from identifying the training needs of teachers responsible for group-teams to planning more interesting competitive frameworks that obey the logic of sports territorialization, through the development of sports that in the region have greater ability to retain young people. Through better management of available resources, it is possible to improve the quality and quantity of sports practice for our youngsters.

05

INTERVIEW #2

— Interview with Susana Alves



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Brief curricular presentation

Susana Alves. PhD in Sports Sciences in the University of Trás-os-Montes and Alto Douro (2013), Master's Degree in Sports, specialization in Physical Condition and Health (2011) in the Escola Superior de Desporto de Rio Maior (ESDRM) of the Polytechnic Institute of Santarém (IPSantarém) and Degree in Sports – variant of physical condition in ESDRM-IPSantarém (2006). Adjunct Professor at the Polytechnic Institute of Santarém, coordinator of the ESDRM Healthy Lifestyles Promotion Office and regent of curricular units related to technical intervention in the context of Physical Activity and Health. Has published 32 articles in specialized magazines, 2 chapters in books, and made several oral and poster communications in national and international congresses, has oriented 2 master theses in Physical Activity and Health and developed several pedagogical materials. Currently, is the Coordinator of 3 Research-Action Projects (i.e., People with Fibre, LEVEL UP Work and Mov&mentAR) and participates as a teacher and researcher in one Research-Action Project (i.e., MIND7+). Has received 12 awards and/or honours.

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What are your objectives as a member of the LQRC-CIEQV?

My main goal is to enhance the LQRC-CIEQV through the quality of the research conducted in the field of physical activity and healthy lifestyles and, in this way, contribute to the scientific robustness of the programs taught in ESDRM in this area. We know that, without good research, there is no good teaching and that is why the research I do is of an applied nature within intervention programmes. At the same time that we apply theory to practice, we can involve students in research, which is also, at the same time, a pedagogical training process. On the other hand, applied research always has a multidisciplinary nature, especially in the field of behaviour, so another objective I have is to interact with other research colleagues and to build bridges and multidisciplinary approaches to the objects of study. The LQRC-CIEQV, as a multidisciplinary centre, is an excellent platform for this interaction with other colleagues from other areas of knowledge.

What are your most important research projects?

Community intervention programmes are the basis of the research I carry out, in order to achieve the objectives mentioned in the previous point. At this moment, I can highlight two projects that I am coordinating. The project “LEVEL UP Work”, which aims to promote physical activity and the acquisition of a healthy lifestyle in the workplace, resulting from a project in Pedagogical Innovation funded by IPDJ-PNPDPt, which is aimed at all non-teaching staff of IPSantarém. The other project is “People with Fibre”, which consists of a community physical exercise programme for women diagnosed with Fibromyalgia and aims to reduce the adverse effects of the disease. This project, funded by IPDJ-PNPDPt, involves a multidisciplinary team and has already given rise to a master's thesis, composed of 3 studies, and several communications at research conferences. This project has been running since 2018 and has made a very significant contribution to improving the quality of life of this population through physical exercise sessions held twice a week, lasting 60 minutes, integrating an aerobic exercise segment lasting 20 to 30 minutes, and a strength training segment consisting of 1 series of 6 to 8 exercises with 15 to 20 repetitions, and a static stretching segment lasting 10 minutes. The recommended initial intensity is low to moderate which, together with the individualisation of the programme, is crucial to ensure the participants' adherence to the programme. The results obtained indicate the validity and reliability of this physical exercise programme on the participants' health and functional capacity, with significant differences at the final moment of assessment, with a decrease in pain points associated with the disease, a reduction in fatigue, stress and anxiety, as well as an improvement in aerobic and functional capacity.

Knowing that knowledge should be transferred to society, how can the area of scientific research and professional intervention in which you are involved contribute to the union of theory and practice?

Since intervention programmes are designed according to existing scientific knowledge, it is possible to test the relevance of this knowledge from a practical point of view and validate the type of intervention by validating its efficiency. We know that physical exercise is highly effective for improving health, however, most programmes are not very efficient because most people drop out within the first 6 months. This is why the knowledge that comes from these intervention programmes is so highly valued because it is not enough to identify what does a person good, we also need to identify what to do to make people adhere to a therapy, in a continuous way, and this is more complex.

Considering that the LQRC-CIEQV promotes research on quality of life, what are the practical implications of the research it carries out?

The research I carry out aims to transpose into practice and validate the generic recommendations made by the main organisations and associations associated with a particular clinical condition. Given that in the context of physical activity we are working with people, the intervention will have to take into consideration a very wide range of factors and technical knowledge, which, most of the time, are not taken into account in this type of recommendation. It is necessary to balance what is recommended with what works in the field and has practical applicability. Thus, the research I am conducting allows me to identify some implications for professional intervention applied to physical exercise programmes, as well as to address some of the limitations associated with the current research, taking them as a consideration for future research.

06

PhD PROJECTS

— Project 1:

Safety and Risk Prevention in Nature Sports. Proposed Risk Analysis Model for accident prevention

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Practitioners of Nature Sport look for fear and emotion in activities, and it is essential for technicians to constantly manage risks and real dangers with the aim of providing positive experiences, on the contrary negative and uninteresting experiences enhance displeasure and abandonment of these activities. activities. Thus, technicians knowing the relevance of risk factors for accidents in nature sports activities and also considering the identification of the highest incidence and prevalence of injuries, make possible a better prevention and intervention in the planning of risk management and in terms of the effectiveness of the First aid.

The risk of activities, the lack of training for technicians and the need for more research and construction of instruments with scientific validity to support technicians raise a concern for the safety culture and the need for actions and procedures for risk prevention and management on the part of the professionals. nature sport coaches.

This project intends to investigate safety and prevention procedures in Nature Sports, taking into account the reality encountered by technicians (DN) and practitioners, but also by rescue technicians and doctors who are an integral part in an emergency context. The general objective of this study will be to create a proposal for a theoretical model for the analysis of safety and risk prevention in nature sports, namely in Canyoning, Climbing and Pedestrianism.

Systematic review methods will be used, characterization of the prevalence and incidence of injuries, development and validation of a proposed list of safety and emergency equipment, and construction of a risk assessment instrument (checklist with risk matrix), as well as, to develop a proposal for rescue and rescue procedures and protocols, adapted to the constraints of the real context, ending with the agglutination of the results of the different studies, creating a proposal for a risk analysis model for the prevention of accidents in Nature Sports. The theoretical model will be supported by 5 articles, which can effectively contribute to a reduction in incidents and accidents in the DN and, consequently, allow a more efficient approach in the preparation and response of protection and rescue actions.

Phase 1 of the model: Critical points of safety and risk prevention (results of studies 1, 2, 3 and 5). i. With a view to improving risk management, with the achievement of a systematization and structuring of the knowledge; ii. establish security and prevention measures; iii. improve injury prevention, most prevalent accidents and incidents. Phase 2 of the model: Assessment of risk factors in a real context (study 4). i. Obtaining an output for a sustained decision; ii. classification of risk factors by levels; iii. recommendations taking into account the level of risk; iv. treatment/action.

Keywords: Safety, Analysis model, Risk, Nature Sport, Prevention.

— Project 2:

VidaProFit – Quality of Life and Work-related Musculoskeletal Problems of Fitness Professionals in Portugal

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The research we are developing is part of the VidaProFit project, inserted in the field of public health, and directed to the study of fitness professionals (FP) in Portugal's population.

The final thesis will be organized according to the Scandinavian model, and three articles will result on the following main topics: (1) QoL of FP in Portugal; (2) MEP of FP in Portugal; and (3) relation between QoL and MEP of FP in Portugal.

Data were collected between November 2019 and March 2020, in the pre-pandemic period. The previously validated questionnaires were available on the online platform SurveyMonkey and applied to FP in Portugal.

The main purposes were the characterization of FP Quality of Life (QoL) and work-related Musculoskeletal Problems (MEP), the correlation of QoL and MEP with sociodemographic and work-related variables, the comparison of QoL levels and MEP between groups, and finally the correlation between QoL and MEP.

This research will allow a better knowledge of fitness professions in Portugal and contribute to the creation of guidelines that potentiate the sustainable growth of the fitness industry and the health, and well-being of FP.

— Project 3:

Daily and Weekly External Loads in the Microcycle: Characterization and Comparison Between Playing Positions on Amateur Soccer

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In soccer, ensuring adequate levels of training and recovery that maximize performance continues to drive the monitoring of load and physical responses to training, however designing training programs for soccer players presents unique challenges and difficulties. A common problem for coaches is to determine the appropriate training loads for each day, week, and season period. In addition to this, they are faced with the need to individualize their plans, managing loads according to the requirements of the competition for each position, as well as the time of participation in the competition. Intending to methodologically guide coaches, the following objectives are pursued: 1. describe which measures are most used and/or useful in load monitoring; 2. Characterize the external match load, by position, verifying the influence of contextual variables; 3. based on match reference, evaluate the weekly and daily training load, comparing the different positions; 4. propose a methodological approach to adapt the training to the players depending on the time of use in competition.

— **Project 4:** **Effects of physical exercise on adults with Intellectual and Developmental Disabilities**

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Aware of the importance of physical exercise (PE) as a way to delay some changes caused by inactivity and aging, as well as to prevent the onset of metabolic and degenerative diseases, we developed a PE and health promotion program for people with Intellectual and Developmental Disabilities (IDD).

The project designated "FITNESS FOR THE MIND" is divided into two PE programs (gym/indoor and outdoor – low cost), addresses the specific needs of this population and aims to promote effects on physical fitness, health in general, cognitive ability and quality of life. Using the quasi-experimental methodology, this intervention study has a sample of 21 adults with IDD, and the intervention groups will receive 45 minutes of training per session, twice a week, for 6 months.

As the project comes to an end, we expect to start releasing some results as soon as possible.

— Project 5:

Space occupation and tactical behavior in youth soccer: Implications for the manipulation and control of small games

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¹ Sport Science School of Rio Maior – Polytechnic Institute of Santarém

² Life Quality Research Centre

The present thesis aimed to achieve a better understanding of the effect of age on the variation of players' playing space and implications for the manipulation of training tasks. For this, we sought, first, through a systematic review, to describe and systematically analyse the tracking systems, variables and statistical methods used to evaluate the tactical behavior of players and teams in the small-sided conditioned games (SSCGs); secondly, we intended to describe the individual area per player, according to age, numerical relationships and the field area in youth football (under 15, under 17 and under 19) and, later, characterize the passing patterns that support the collective tactical behavior in soccer players of different ages (under 15, under 17 and under 19), in different areas of the field. The results of the first study revealed that GPS are the most used tracking systems to evaluate tactical behavior, through different spatial metrics that derive from the positioning of players. The results of the second study showed, in all numerical relationships, that the playing areas were larger in the areas close to the goals and in the under 15 level. Another interesting fact is the fact that the differences were more expressive between age groups when the numerical relationships included ten or more players. In the third study, the results revealed that the medium passes were more used in the areas close to the goals, and the short passes in the medium area of the field, in all ages. The analysis of the relative distance between the ball carrier and the receiver indicated that the older players (under 17 and under 19) used more distant players to pass the ball, in medium and long passes. In short, the present thesis contributed to increase the knowledge of the individual and collective tactical behavior of the game in youth football, in order to help coaches to design small-sided conditioned games according to the competitive environment.

Keywords: Youth football; small-sided conditioned games; tactical behavior; positional variables; tracking systems; field zones; game areas; numerical relationships; passing.

References

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— Project 6:

In-season internal and external workload quantification in Portuguese Elite Women Soccer

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² Life Quality Research Centre

The aims of this study were: quantify external and internal intensities, to access wellness profile and body composition variables from a professional female soccer Portuguese team during the 2019/20 in-season.

A total number of 19 female players participated in this study. A 10-Hz GPS device (PlayerTek) was used to collect distance and accelerometry-based measures. Rated Perceived Exertion (RPE) and session-RPE were recorded as internal measures. The Hooper Index (HI) was collected as a wellness parameter. Internal, external and wellness variables were collected daily. For the body composition, the athletes were assessed in three phases (before the start of the season, after 2 months, and after 4 months) through bioelectrical impedance analysis (InBody S10).

This thesis showed us many conclusions, among them: the highest internal and external load occurred in the match while no training session achieved such intensity; wellness variables showed minor variations across the training sessions and matches as well as microcycles; no differences were detected in internal load among playing status and positions; the external training load applied contributed to improve body composition variables which means positive improvements to the specific training strategies imposed by the coach.

Keywords: Women Soccer; Soccer Training; Training Load Quantification; Internal Load; External Load; Wellness Quantification; Body Composition.

This doctoral thesis was supported by the following papers:

Fernandes, R., Oliveira, R., Martins, A., Brito, J.M. (2021). Internal training and match load quantification of one-match week schedules in female first league Portugal soccer team. *Cuadernos de Psicología del Deporte*, 21(3), 126-138. <https://doi.org/10.6018/cpd.469141>

Fernandes, R., Brito, J.P., Vieira, L.H.P., Martins, A.D., Clemente, F.M., Nobari, H., Reis, V.M., Oliveira, R. (2021). In-Season Internal Load and Wellness Variations in Professional Women Soccer Players: Comparisons between Playing Positions and Status. *International Journal of Environmental Research and Public Health*, 18, 12817. <https://doi.org/10.3390/ijerph182312817>

Fernandes, R., Ceylan, H.I., Clemente, F.M., Brito, J.P., Martins, A.D., Nobari, H., Reis, V.M., Oliveira, R. (2022). In-Season Microcycle Quantification of Professional Women Soccer Players – External, Internal and Wellness Measures. *Healthcare*, 10, 695. <https://doi.org/10.3390/healthcare10040695>

Fernandes, R., Martins, A.D., Clemente, F.M., Brito, J.P., Nobari, H., Reis, V.M., Oliveira, R. (2022). Variations of Distance and Accelerometry Based GPS Measures and Their Influence on Body Composition in Professional Women Soccer Players. *Proc IMechE Part P: Journal of Sports Engineering and Technology*, 1-9. <https://doi.org/10.1177/17543371221122076>

— **Project 7:** **The impact of motivational variables on body image on fitness practitioners**

Rogério Salvador ^{1,2}

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² Life Quality Research Centre

Abstract: Turning physical exercise into a habitual behavior is a complex process. Studies have shown that individuals will drop-out in the first stages. However, literature is scarce on full casual sequences according to motivational theories and/or have not considered the utility of other cognitive constructs on analyzing exercise commitment. Social networks and the media influence the creation of stereotypes of ideal bodies, often giving rise to a distorted view of the body image (BI). **Aim:** The aim of this work is to analyze BI dissatisfaction in exercise practitioners as well as its relationship with the practice of physical exercise, motivation and eating regulations. **Methodology** **Sample:** 957 fitness practitioners **Instruments:** Interpersonal Behaviours Questionnaire, Basic Psychological Needs Satisfaction and Frustration Scale, Behavioral Regulation Exercise Questionnaire, Regulation of Eating Behavior Scale, Physical Activity Enjoyment Scale, Stunkard Figure Rating Scale.

07

NEWS – PROJECTS UNDER DEVELOPMENT

— Project 1:

Promotion of Physical Activity and Health: Community Intervention Program “Ativa(MENTE)”

Ana Pereira ^{1,2}

¹ School of Education – Polytechnic Institute of Setúbal

² Life Quality Research Centre

The elderly are particularly prone to risks of hospitalization, including high risk of functional and cognitive deterioration. This project funded by the Portuguese Institute of Sport and Youth – National Program Sport for All, aims to prescribe individualized exercises with characteristics of multicomponent training. The project will seek to respond to the social isolation caused by the COVID-19 pandemic that affected the surrounding community in the District of Setúbal. The training sessions aim to change lifestyle habits and reduce sedentary behaviors through physical exercise with stimulation of cognitive function. The intervention program has physical activity sessions held in the sports pavilion of the Polytechnic Institute of Setúbal in partnership with the Social Action Services. Each exercise session is designed according to the three risk factors associated with aging: strength, muscle speed, and balance. We use motivational strategies and distance monitoring to increase autonomy and independence in the assumption of more active daily behaviors and promotion of regular physical activity.

— **Project 2:** **New Health “LIFESTYLE AS MEDICINE”**

Carla Chicau Borrego^{1,2}, Susana Franco^{1,2}, Vera Simões^{1,2}

¹ Sport Science School of Rio Maior – Polytechnic Institute of Santarém

² Life Quality Research Centre

The New Health “LIFESTYLE AS MEDICINE” project is in its final phase and the spreading of this free material can begin!

In the past 3 years a group of 12 passionate experts in the field of lifestyle and prevention, created inspiring Lifestyle as medicine educational material about active living, healthy eating and a health mindset, a Lifestyle Scan, a New Health App and a portal for professionals, consumers and companies. Together with EuropeActive we created the standard ‘Healthy Lifestyle Promoter’ and in all partner countries the pilot education and examination of the Healthy Lifestyle Promotor was conducted.

A great project to lead and be a part of, wonderful and valuable output, an exceptional project team of colleagues – friends from 8 countries.

Do you want to take a look at the most important project outcome: <https://new-health.eu/en/videos>

Do you want to sign in for free as a professional, consumer, partner <https://new-health.eu/en/register>

Do you want to do a personal lifestyle scan and see where you can improve your health: <https://new-health.eu/en/do-the-lifestyle-scan>

Our goal is to spread these essential insights about lifestyle as medicine all over the world. So join us on this mission!



— Project 3: “MatematicAtiva”



Liliana Ramos^{1,2}, Susana Franco^{1,2}, Marta Santos^{1,2}, Vera Simões^{1,2}

¹ Sport Science School of Rio Maior – Polytechnic Institute of Santarém

² Life Quality Research Centre

Liliana Ramos, Susana Franco, Marta Santos and Vera Simões (ESDRM_IPSantarém) are responsible for the “MatematicAtiva” project, funded by the Portuguese Institute of Sports and Youth. This project, started in September 2022, has the main goal of implementing a physical exercise program (PEP) with Mathematics content, in a school of the 1st cycle of basic education. This is a pioneer project in Rio Maior region.

Specific objectives: Promote physical activity (PA) and the adoption of healthy lifestyles in children; Contribute to the recovery of learning, resulting from the COVID-19 pandemic; Identify articulation models between the Sports and Education sectors.

There is a control group (conventional Mathematics sessions in the classroom) and an experimental group (Mathematics PEP sessions), with 15 children each, of both sexes, aged 7 to 9 years.

The program is divided into 3 phases: recruitment and preparation (2 months); implementation and development (3 months), which includes conventional Mathematics sessions in the classroom and PEP sessions, with the contents of the Mathematics subject, once a week (45 minutes); evaluation and dissemination of results (1 month).

Weekly, the children's PA levels will be assessed, in both groups (in the day of the sessions) using accelerometers. The assessment of the learning of Mathematics content was carried out at the beginning with a diagnostic-test, and it will be at the end of the program with an evaluation test. All ethical procedures were respected.

— **Project 4:** **Effects of exercise – resistance training and walking – on an older population**

Nuno Dias¹, Christophe Domingos^{1,2}, Carla Borrego^{1,2}, Marco Branco^{1,3}

¹ Sport Science School of Rio Maior – Polytechnic Institute of Santarém

² Life Quality Research Centre

³ Interdisciplinary Center for the Study of Human Performance

A master's student will start a project on the effects of exercise – resistance training and walking – on an older population. For this project, the EEG will measure electrical activity during a walking task. The objective will be to understand how resistance training will affect gait and cognitive functions in the elderly. Knowing that cognitive functions decline with age, it is imperative to observe changes happening at a central level using exercise as a tool for prevention.

— Project 5: “Dar Vida aos Anos” and “IDADE ATIVA”

Rafael Oliveira^{1,2}, João Paulo Brito^{1,2}, Alexandre D. Martins^{1,2}

¹ Sport Science School of Rio Maior – Polytechnic Institute of Santarém

² Life Quality Research Centre

Within the scope of the Community Programme: “Dar Vida aos Anos” of the Municipality of Esposende, developed under a protocol with ESDRM-IPSantarem International, the following work were carried out by Rafael Oliveira, João Paulo Brito and Alexandre D. Martins:

- oral communication “Dar Vida aos Anos” – Physical Exercise for the Well-being and Health of the Population” at the Sports and Health Symposium – Assessing and Intervening for Success, 15 and 16 October 2022, Porto.
- oral communication “COMPARISON BETWEEN BIOIMPEDANCE VARIABLES AND FUNCTIONAL TESTS BASED ON BODY MASS INDEX IN ELDERLY WOMEN” in the International Sports Meeting held by the Higher School of Sports and Leisure of Melgaço, of the Polytechnic Institute of Viana do Castelo, March 24-25, 2022.

Within the scope of the Community Program: “IDADE ATIVA” developed under a partnership between the University of Évora, the Municipality of Évora and ESDRM-IPSantarem the following actions were carried out:

- oral communication “Effects of an eight-weeks High-Speed Resistance Training program on physical function in Independent Older Adults” in the 3rd Comprehensive Health Research Centre Annual, November 3-4, Lisbon, Portugal.
- oral communications “Phase Angle Can Predict Bone Indicators in Older Adults: A Cross-Sectional Study” and “Phase Angle Can Predict Muscle Strength in Older Adults: A Cross-Sectional Study” in the International Conference on Technology in Physical Activity and Sport, November 16-17, Sevilla, Spain.

— Project 6:

Physical exercise and cognition in elderly people

Rui Bessa^{1,2}, Jorge Soares^{1,2}, Luís Leitão^{3,4}, Ana Pereira^{3,4}

¹ University of Trás-os-Montes and Alto Douro

² Research Centre in Sports Sciences – Health Sciences and Human Development, Vila Real, Portugal

³ Department of Science and Technology – Polytechnic Institute of Setúbal

⁴ Life Quality Research Centre

Physical exercise training programs promote beneficial effects for health and quality of life (Leitão et al., 2022). This study aimed to investigate the effects of physical exercise program on cognition in institutionalized elderly. The sample consisted of 26 institutionalized elderly, randomized into two groups: the intervention group (n=12; 84.75±5.07 years and BMI 29.09±3.76 kg/m²), undertook a physical exercise program during 16 weeks with a frequency of 3 low volume weekly sessions (25/35 minutes per session) and the control group (n=14; 81.50±7.90 years and BMI 29.69±6.38 kg/m²) did not perform any type of physical exercise. Functional Capacity was assessed using the Senior Fitness Test battery, and to assess the cognitive function we used the Mini Mental State Examination test. The intervention group improve all functional capacity especially in strength of lower and upper limbs, flexibility, agility and dynamic balance/gait and aerobic capacity, as well as in cognitive functions (p<0.05). The control group showed a significant decline in all measures (p<0.05). These results reinforce the idea that the implementation physical exercise based in strength an aerobic component. Besides, have an impact on cognitive function and these are fundamental to maintaining and improving the quality of life and independence of the elderly.

Keywords: Physical exercise; Functional capacity; Mini-mental state exam; Aging.

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08

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09

R&D ACTIVITIES

- **Invitation for publication in Symmetry journal**

The researcher Prof. Dr. Mário Espada with researcher Prof. Dr. Fernando Santos are the guest editors of a special issue with the topic: *Symmetry and Asymmetry in Biomechanics and Human Physiology*. Deadline for manuscript submissions: 31 December 2022. More information [SEE MORE](#).

- **Invitation for publication in Healthcare journal**

The researcher Prof. Dr. João Brito with researcher Prof. Dr. Rafael Oliveira are the guest editors of a special issue with the topic: *Improve Athletes' Performance and Avoid Health Issues*. Deadline for manuscript submissions: 28 February 2023. More information [SEE MORE](#).

- **Invitation for publication in International Journal of Environmental Research and Public Health (IJERPH)**

The researcher Prof. Dr. Nuno Loureiro, Prof. Dr. Rafael Oliveira and Prof. Dr. Fernando Santos are the guest editors of a special issue with the topic: *Football Related Injury and Health Problems*. Deadline for manuscript submissions: 20 April 2023. More information [SEE MORE](#).

- **Invitation for publication in International Journal of Environmental Research and Public Health (IJERPH)**

The researcher Prof. Dr. João Brito with researcher Prof. Dr. Rafael Oliveira are the guest editors of a special issue with the topic: *Wellness, Fitness, Body Composition, Training and Performance Monitoring to Improve Athletes Life Quality*. Deadline for manuscript submissions: 23 April 2023. More information [SEE MORE](#).

- **Invitation for publication in International Journal of Environmental Research and Public Health (IJERPH)**

The researcher Prof. Dr. João Brito with researcher Prof. Dr. Rafael Oliveira are the guest editors of a special issue with the topic: *Exercise Monitoring, Testing and Prescription Strategies to Improve Quality of Life in Athletes and Non-athletes*. Deadline for manuscript submissions: 31 May 2023. More information [SEE MORE](#).

- **Invitation for publication in Healthcare journal**

The researcher Prof. Dr. João Brito with researcher Prof. Dr. Rafael Oliveira are the guest editors of a special issue with the topic: *Exercise Testing and Prescription Strategies to Improve Quality of Life*. Deadline for manuscript submissions: 23 October 2023. More information [SEE MORE](#).

- **Project New Health 2022**

- New Health 2022: aims to provide organizations, professionals, volunteers, and consumers with knowledge and tools to improve physical activity, healthy eating, mental health, and a healthy lifestyle. The working group met in Bratislava.



- In the scope of the European project New Health 2022, the Multiplier Event – Promotion of Healthy Lifestyles took place on October 17th at ESDRM. The opening ceremony was attended by the sub-director of ESDRM, Prof. Teresa Bento and the president of *IPDJ – Instituto Português do Desporto e Juventude, I.P.*, Dr. Vítor Pataco. The lecturers Professors Rute Santos, Susana Franco, Teresa Branco and Pedro Saint-Maurice shared research results, knowledge, and experiences in the area of lifestyles. The session had 300 participants. The Project “New Health” aims to promote a healthy

lifestyle (#Lifestyle/ #health promoter), in three pillars: Physical Activity, Food and #Mindset, using knowledge and easy-to-use tools. Funded by the Erasmus+ program, the ESDRM is the national partner being locally coordinated by the researchers Carla Chicau Borrego, Susana Franco, and Vera Simões.

- **I&D Projects in the scientific areas of LQRC-CIEQV**

More information [**SEE MORE**](#).

10

CALLS AND FUNDING

- Calls for support to *Turismo*, START-PME. Status: open. More information [**SEE MORE**](#).
- Calls for support to *Programa de Desenvolvimento Rural*, START-PME. Status: in preparation. More information [**SEE MORE**](#).
- Calls for support to *Plano de Recuperação e Resiliência*, START-PME. Status: open. More information [**SEE MORE**](#).
- Calls for support to *Programa ATIVAR.PT*, START-PME. Status: open. More information [**SEE MORE**](#).
- Calls for support to *Apoio à Produção Nacional*, START-PME. Status: open. Deadline: to be defined. More information [**SEE MORE**](#).
- Calls for support to *Programa de Incentivo para os Açores*, START-PME. Status: in preparation. More information [**SEE MORE**](#).
- Calls for support to *Apoios à contratação – IEFP*, START-PME. Status: open. More information [**SEE MORE**](#).
- FCT contest schedule 2021-2023. FCT provides the calendar of competitions scheduled for the years 2021 to 2023. More information [**SEE MORE**](#).
- Founders Program Indico, Powered by Google for Startups (5 000 000€). Call continuously open. More information [**SEE MORE**](#).
- Financing opportunities for *SMEs na área do Digital*, European Digital SME Alliance. Calls opening on 28 June 2022 and deadline on 9 December 2022. More information [**SEE MORE**](#).
- Announcement for the award of a research scholarship ref: ESE/BI/D/2022/02. Deadline: 12 December 2022. More information [**SEE MORE**](#).
- Horizon Europe: a new initiative for Young Observer, European Commission. Deadline: 14 December 2022. More information [**SEE MORE**](#).
- ERC Science Journalism Initiative, European Research Council. Deadline: 15 December 2022. More information [**SEE MORE**](#).
- Award of a research scholarship for a master's student within the scope of the Santarém cluster of the CIEQV Research Unit. Scientific area: Education and Training (Sports Coaches). Deadline: 16 December 2022. More information [**SEE MORE**](#).
- Calls for innovative projects in various areas of social and exact sciences, funded by EEA Grants Portugal. Deadline: 4 December 2020 to 30 June 2023. More information [**SEE MORE**](#).

- Call for Advanced Computing Projects (3rd edition), Portuguese Foundation for Science and Technology. Deadline: 6 December 2022. More information [**SEE MORE**](#).
- Spencer Foundation – Research-Practice Partnerships: Collaborative research for educational change, Spencer Foundation. Budgets up to \$400,000 and a maximum duration of three years. Deadline: 7 December 2022. More information [**SEE MORE**](#).
- Horizon Europe: a new initiative for Young Observer, European Commission. Deadline: 14 December 2022. More information [**SEE MORE**](#).
- Call for Applications for up to 6 Doctoral Scholarships 2023/2024. Deadline: 15 December 2022. More information [**SEE MORE**](#).
- Support Fund for Small and Medium Companies of the European Union. Deadline: 16 December 2022. More information [**SEE MORE**](#).
- 2 Bolsas LPCC-NRS/Terry Fox, *Liga Portuguesa Contra o Cancro*. Budget 15.000€. Deadline: 30 December 2022. More information [**SEE MORE**](#).
- New European Bauhaus 2022 – Transformation of places of learning, European Union. Deadline: 31 December 2022. More information [**SEE MORE**](#).
- Fernandes Fellowships, Warwick – Institute of Advanced Study. Deadline: 31 December 2022. More information [**SEE MORE**](#).
- Future of Food, Bioeconomy Ventures. Deadline: December 2022 and March 2023. More information [**SEE MORE**](#).
- Award “Investigação sobre a Juventude AEJ 2022”, *Instituto Português do Desporto e Juventude*. Deadline: 31 December 2022. More information [**SEE MORE**](#).
- Portal Funding & Tenders, for the following areas of Cluster 5 – *Clima, Energia e Mobilidade*: “Energy supply”. Deadline: 10 January 2023. More information [**SEE MORE**](#).
- HORIZON-CL5-2022-D3-03: Sustainable, secure and competitive energy supply. Deadline: 10 January 2023. More information [**SEE MORE**](#).
- “La Caixa” Foundation – Call for 80 scholarships for post-graduate studies. Deadline: 1 February 2023. More information [**SEE MORE**](#).
- Horizonte Europa – ERC Consolidator Grants. Funding: 2 000 000€. Deadline: 2 February 2023. More information [**SEE MORE**](#).
- Preannounce of call for proposals – Joint Transnational Call on cardiovascular diseases. Deadline: 7 February 2023. More information [**SEE MORE**](#).
- Spencer Foundation – Research Grants on Education: Large. Deadline: 12 January 2023 (1st phase) and 22 February 2023 (2nd phase). Budgets from \$125,000 to \$500,000, with duration between one and five years. More information [**SEE MORE**](#).

- HORIZON-CL5-2022-D4-02: Efficient, sustainable and inclusive energy use. Deadline: 24 January 2023. More information [**SEE MORE**](#).
- Sustainability 2022 Young Investigator Award. Deadline: 31 January 2023. More information [**SEE MORE**](#).
- “Prémio CEI-HTInvestigação, Inovação e Território”. Deadline: 3 February 2023. More information [**SEE MORE**](#).
- Award Sports Science – Comité Olímpico de Portugal. Deadline 28 February 2023. More information [**SEE MORE**](#).
- Water4All 2022 Joint Transnational Call. Deadline 20 March 2023. More information [**SEE MORE**](#).
- BioeconomyVentures – Open calls – Future of Food. Deadline: March 2023. More information [**SEE MORE**](#).
- LIFE Calls for proposals 2022. Deadline (full proposals): 30 March 2023. More information [**SEE MORE**](#).
- Biodiversa+ Transnational Calls. Deadline: 5 April 2023. More information [**SEE MORE**](#).
- *Programa Cidadãos Ativ@s* – Bilateral Cooperation Initiatives of the *Fundação Bissaya Barreto* and *Fundação Calouste Gulbenkian*. Deadline 30 June 2023. More information [**SEE MORE**](#).
- European Commission – Competitive calls and calls for third parties. Areas of interest: Food; Energy Transition; Climate; Mobility; Digitization. Deadline: 22 July 2023. More information [**SEE MORE**](#).

11

AGENDA

- **Colloque Plurimaths – Contextes et pratiques multilingues dans l’enseignement de disciplines scolaires**, Colloque Plurimaths, 30 November and 1 December 2022, Paris. More information [SEE MORE](#).
- **Escritura académica: ¿Subordinar la enseñanza de los géneros a la enseñanza de las disciplinas? Cuándo, por qué y cómo**, Giceolem, 2 December 2022. More information [SEE MORE](#).
- **Social and emotional learning (SEL): The road ahead**, 5 December 2022, Auditorium 2C, FPCEUP. More information [SEE MORE](#).
- **Education at a Glance – Desigualdades no Ensino Superior em Portugal e no Brasil**, 6 December 2022, online, *Centro de Estudo Interdisciplinares em Educação e Desenvolvimento*. More informativo [SEE MORE](#).
- **Seminar – O ensino da tática e da estratégia na Educação Física: que conteúdo é esse?**, 7 December 2022, Department of Education and Psychology, University of Aveiro. More information [SEE MORE](#).
- **II Congresso Internacional Sobre os Novos Desafios dos Direitos Humanos (II CINDHU)**, 7 December 2022, Polytechnic of Leiria. More information [SEE MORE](#).
- **SRIA, Strategic Research, and Innovation Agenda, PerMed International Conortium**, 7 December 2022. More information [SEE MORE](#).
- **Infodays Horizonte Europa – Cluster 4**, European Commission. 12-14 December 2022. More information [SEE MORE](#).
- **Cluster 6: Info days and brokerage event**, Horizon Europe. 13-14 December 2022. More information [SEE MORE](#).
- **VII Seminário “Conhecer Mais para Incluir Melhor”**, Federação Portuguesa de Desporto para Pessoas com Deficiência. 17 December 2022. More information [SEE MORE](#).
- **7th World Conference on Qualitative Research (WCQR2023)**, 25-27 January 2023, hybrid event. More information [SEE MORE](#).
- **1ª Conferência Internacional sobre Formação Contínua de Professores (ICTCE 22)**, 2-3 February 2023, University of Aveiro. More information [SEE MORE](#).
- **VII ENJIE – Encontro Nacional de Jovens Investigadores em Educação – Desafios Atuais na Investigação em Educação: Agendas Emergentes**, 3-4 February 2023, School of

Education of the Polytechnic Institute of Porto (ESE/IPP) and FPCEUP. More information [**SEE MORE**](#).

- **ICES2023**, 6-8 February 2023. More information [**SEE MORE**](#).
- **VII Congresso Ibero-Americano de Política e Administração da Educação/X Congresso Lusó-brasileiro de Política e Administração da Educação – “Política e Gestão da Educação. Temas críticos no Espaço Ibero-Americano”**, 6-8 February 2023, Institute of Education, University of Lisbon. More information [**SEE MORE**](#).
- **AIESEP International Conference**, 24 February 2023. More information [**SEE MORE**](#).
- **Young L2 learners and Games Conference**, 31 March – 1 April 2023, online. More information [**SEE MORE**](#).
- **XII Congresso Português de Sociologia – Sociedades polarizadas? Desafios para a sociologia**, 4-6 April 2023, *Convento de São Francisco*, Faculty of Economics, University of Coimbra. More information [**SEE MORE**](#).
- **9th International Conference of the Immersive Learning Research Network**, 18-20 May 2023, online (iLRN Virtual Campus & Across the Metaverse), 26-29 June 2023, San Luis Obispo, California, EUA. More information [**SEE MORE**](#).
- **V Congresso Nacional de Educação para a Saúde**, 31 May, 1-2 June 2023, Évora. More information [**SEE MORE**](#).
- **International Conference “The Lusophone World and its Diasporas”**, 28 June – 1 July 2023. York University Toronto, Canada. More information [**SEE MORE**](#).
- **EERA Summer School 2023 – Participatory approaches in educational research**, 26-30 June 2023, Faculty of Psychology and Education Sciences of the University of Porto. More information [**SEE MORE**](#).
- **6^o Colóquio Internacional de L’ARCD**, 27-30 June 2023, Switzerland. More information [**SEE MORE**](#).
- **10th International Conference of EDiLiC – From Early Childhood to Adulthood: Transitions, Continuity and Disruptions in Plurilingual Education**, 28-30 June 2023 University of Copenhagen, Denmark. More information [**SEE MORE**](#).
- **ISATT Conference 2023 – Living and Leading in the Next Era: Connecting Teaching, Research, Citizenship and Equity**, 3-7 July 2023, Bari, Italy. More information [**SEE MORE**](#).
- **2023 International Conference**, 4-7 July 2023, Santiago, Chile. More information [**SEE MORE**](#).