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OC01 - WOMEN ELITE ITALIAN FOOTBALL PLAYERS' PERCEPTIONS ON GENDER EQUALITY AND DUAL CAREER OPPORTUNITIES

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Purpose: Gender equality and quality education represent key priorities in pursuing strategic objectives of sustainable development (United Nations, 2015). However, gender discrimination and dual career (e.g., the combination of sport and educational demands in elite sportspersons) issues permeate several sporting contexts (European Commission, 2022; IOC, 2023). In considering that a considerable gender gap in football still persists, the present study aimed to investigate women elite Italian football players' perceptions regarding their dual career experiences, in light of potential gender inequalities that might have affected their sporting and academic career paths.

Methods: A 25-items semi-structured electronic questionnaire was administered to 22 Italian women elite Italian football players. Qualitative analysis and descriptive statistics have been applied.

Results: Respondents (age: 25.8 ± 4.3 years) highlighted difficulties in combining sport and education (e.g., lack of time, lack of dual career opportunities), and a higher support received from the sporting context (e.g., training absences and schedule adaptation) rather than from academic institutions (e.g., lack of flexibility for missing classes and exams). Few participants only reported a formal recognition of the student-athlete status and the access to a dual career programme, mainly due to gender differences in the recognition of eligible competitive levels to be considered a "student-athlete". The gender pay gap in professional football was also perceived as a crucial factor in determining women's major interest in academics. Indeed, the football career was perceived as not ensuring a safe future, determining career choices and trajectories negatively influencing participants' athletic performance development.

Conclusions: The present findings reflect previous literature in this field, with the football sporting career perceived as insecure and of short-term nature both in contract length and career duration (Roderick, 2006; Culvin, 2020), even more for women in a male-dominated industry. Although participants reported that the recent professional

recognition and gender equality policies ameliorated their football and dual career conditions, the present study highlighted the need to further investigate gender and dual career intersecting inequalities in football.

OC02 - EFFECTS OF REPEATED MENTAL FATIGUE ON TRAINING VOLUME AND HYPERTROPHY FOLLOWING A 12-WEEK RESISTANCE TRAINING PROTOCOL IN UNTRAINED ADULTS: A RANDOMIZED TRIAL

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Purpose: This study aimed to analyze the effects of a 12-week repeated mental fatigue intervention before resistance exercise sessions on training volume and muscle hypertrophy in untrained adults.

Methods: We employed an experimental design with group as the between and time as the within factors. Participants ($n = 34$) attended 45 sessions over fifteen weeks, consisting of three familiarizations (first week), three baselines (second week), 36 resistance exercise sessions (weeks three to fourteen), and three visits post-experiment (week fifteen). Muscle thickness for the rectus femoris and vastus lateralis were measured before (baseline) and after (post-experiment) the 12-week intervention. The number of repetitions for all resistance exercise sessions was quantified. The total number of repetitions was obtained by the sum of all resistance training sessions. The Stroop task was used as experimental manipulation to induce mental fatigue. The subjective rating of mental fatigue was assessed using the 100 mm VAS. However, we individualized the cognitive load to produce similar mental fatigue levels in all participants. The resistance training program included six sets of half back-squat exercise with a rest interval of 150 s between sets. A velocity-based load was used instead of a traditional loading-based resistance exercise program. Mean propulsive velocities of $1.0 \text{ m}\cdot\text{s}^{-1}$ (45% 1RM), $0.8 \text{ m}\cdot\text{s}^{-1}$ (60% 1RM), and $0.6 \text{ m}\cdot\text{s}^{-1}$ (75% 1RM) were used as light, moderate, and high intensity-load, respectively. The General Estimating Equations analyzed the main effects and interaction between group (i.e.,

Purpose: Numerous studies have emphasized the importance of physical activity (PA) in the workplace as a pivotal strategy to reduce sedentary behaviors. A recent meta-analysis examining studies involving 12 weeks of circuit training (CT), characterized by high-intensity exercise bouts interspersed with short rest periods, demonstrated significant benefits in body composition, metabolic profile and cardiorespiratory fitness (CRF) among employees. “Ateneo in Movimento” is a project of the University of L’Aquila that aims to promote the psycho-physical well-being of employees through on-site physical exercise classes. Therefore, the objective of this study was to evaluate the effects of the first 12 weeks of a 24-week CT protocol on physical fitness (PF) in the adult academic community of UnivAQ.

Methods: Sixty-one participants were divided into an intervention group (IG, $n = 32$; age = 46.5 ± 15.3 yrs) and a control group (CG, $n = 29$; age = 42.1 ± 14.9 yrs). The IG group performed a CT consisting of 8 stations twice a week for 12 weeks, with a work-rest ratio of 1:1 (30 s) for 3 rounds. The CG continued to engage in their usual daily activities during the study period. The following variables were evaluated before (T0) and after 12 weeks (T1): Fat Free Mass (FFM%) and Fat Mass (FM%) for body composition, balance with one leg stand test, upper mobility with shoulder neck mobility, upper limbs strength with handgrip, lower limbs strength with jump and reach, core strength with dynamic sit-up, CRF with 2-min step test. In addition, IPAQ was administered for the assessment of daily METs.

Results: One-way ANCOVA, with pre-test values as covariate, showed a difference for the 2-min step test in IG compared to CG ($p = 0.007$). A paired t-test was used to evaluate Pre-Post effects within the group: differences were found in the IG for FFM% ($p = 0.041$), daily METs ($p = 0.05$), dynamic sit-up ($p = 0.002$) and 2-min step test ($p < 0.001$). In CG differences for handgrip and jump and reach were found ($p < 0.001$, $p = 0.003$).

Conclusions: The pairwise comparison between groups suggests that the CT proposed during the intervention was effective in improving CRF for IG. Moreover, the intervention on the workplace seemed to produce an improvement of the FFM%, abdominal strength and daily METs. As the study spans a total duration of 24 weeks and only the initial 12-week period (T0-T1) was evaluated, additional results are expected upon completion of the protocol at the T2 evaluation.

P14A - EMPOWERING YOUTH MENTAL HEALTH: THE ICEHEARTS EUROPE IMPLEMENTATION GUIDE

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Purpose: Recent data indicates that, in Europe, 13% children and adolescents aged 19 and younger experienced poor mental health. Such experience during these years is commonly associated with factors such as violence, bullying, discrimination, conflict, displacement, and socioeconomic disadvantage. Poor mental health roots are extensive, impacting both individuals and societies. Despite this, investments in services remain low. Furthermore, several barriers may impede access to social support—e.g. limited availability, inadequately trained professionals, lengthy waiting times, high costs, stigma, and low mental health literacy—all of which may deter individuals from seeking help. On this perspective, Icehearts Europe project endeavours to address these issues by proposing a long-term

program aimed at promoting and supporting health and well-being of disadvantaged children and adolescents at the EU level.

Methods: Inspired by the Finnish best practice Icehearts, the Icehearts Europe project (funding: EU4Health 2022 Programme) is a 12-year preventive mentoring program based on team sports, recreational, and school support activities, underpinned by a child-centred community approach. To facilitate the implementation, a practical guide has been developed. It provides grassroots sports and social promotion organizations with operational insights for embedding the Icehearts Europe model within their contexts. Guide’s development stems from a multisectoral cooperation between grassroots sports, health, universities, NGOs, and qualitative research activities such as bibliographic research, study visits, analyses of local contextual situations and needs. Five pilot countries (Italy, Denmark, Spain, Slovenia, Estonia) will test the model, with the aim of raising awareness of its efficacy and encouraging broader engagement in the EU.

Results: The Icehearts Europe Implementation Guide has been made accessible online in six languages through the link <https://www.icehearts.eu/resources> from February 2024.

Conclusions: This guide marks a step forward in supporting disadvantaged children and adolescents across various stages of their growth while promoting their health and well-being. It includes a range of strategies tailored to accommodate diverse contexts, acknowledging the absence of a universal solution. This adaptability is for developing early interventions, meeting the specific needs of individuals and communities.

P14B - APPLICATION OF WEARABLE INERTIAL SENSORS IN PATIENTS WITH KNEE OSTEOARTHRITIS: A STATE OF THE ART

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Purpose: Knee osteoarthritis (KOA) is a leading cause of disability with a significant impact on daily living and quality of life. Assessment of mobility is the main parameter for determining the severity and progression of functional impairment and evaluation of interventions in individuals with knee OA. Recent advances in inertial sensor technology have opened avenues for mobile gait assessments. Importantly, the use of inertial sensors enables remote monitoring of gait in a person’s own environment, substantially improving the ecological validity of evaluation of physical function. On the light of this evidence, the aim of our work was to propose a systematic review providing an overview on the utility and the accuracy of wearable inertial sensors measurement in gait analysis in subject affected by KOA.

Methods: A systematic search was conducted in for electronic databases (PubMed, Scopus, Medline, and Google Scholar) to identify eligible articles. Risk of bias was assessed using a modified version of the Downs and Black scale. Data regarding study population (age,