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Active Innovative Pathways and Collaborative Practices in Exercise and Sports Science for Holistic Health and Wellbeing

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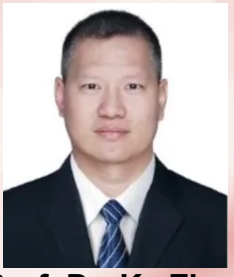

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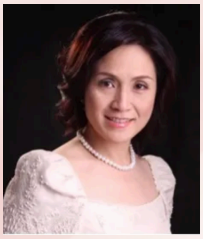

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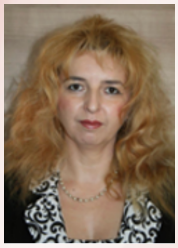

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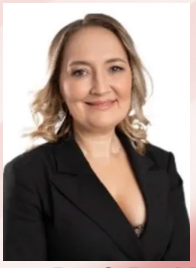

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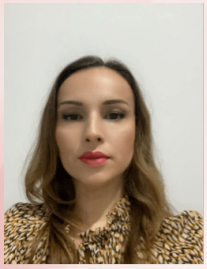

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Keynote Speakers

Assoc. Prof. Dr. G. BALASEKARAN, FACSM, FECSS, FNTUTEA
President, Asian Council of Exercise & Sports Science (ACESS)
American College of Sports Medicine (ACSM) Health Fitness Director
Fellow of ACSM (FACSM)
Fellow of European College of Sports Science (FECSS)
Fellow of Nanyang Technological University Teaching Excellence Academy (FNTUTEA)
Head, Physical Education & Sports Science (2015-2018)
National Institute of Education, Nanyang Technological University
Programme Director, Sport Science & Management (2015-2018)
Nanyang Technological University Singapore

Assoc. Prof. Dr. G. Balasekaran is at the Nanyang Technological University, Singapore. His research projects include physiological responses in exercise and adaptations to health and sports performance, also investigating the influence of factors such as genes, mathematical models, intensity regulation on exercise related outcomes. He is currently actively involved in investigating physiological predictors of human performance in elite world class runners, and healthy populations. In addition, he is very well versed in the knowledge of sports science and its application in track & field. Dr Bala obtained his PhD from the University of Pittsburgh, USA and did his Post-Doctoral fellowship in molecular genetics at the same University. He has published many research papers, abstracts, proceedings papers and book chapters in mostly first rated journals and books in physiological journals. His involvement in the international and local scene is extensive as epitomized by his involvement with several Sports Science, Physical Education and Sport management associations. Currently he is the President of ACESS. Dr Bala's experiences as a former athlete helps in his understanding of the demands of high-level sports as he had represented Singapore in numerous long distance running events and had excelled and won numerous medals in various international and local meets. He had also raced in the various States and Regional College meets in the USA, most notably qualified, and raced in the prestigious National Collegiate Athletic Association (NCAA) cross-country championships finals in USA at Humboldt University. Currently he is a volunteer coach with his world athletics certificates and is coaching national long-distance athletes – coached athletes to national records. He was also a member of the Singapore Brain Breaks project in collaboration with Fuhua Primary School and now currently working with other primary schools to make it a United Nations Sustainable Development Goals (UNSGD) laboratory in Singapore.

Comparison Between External Counterpulsation (ECP) Therapy and External Pneumatic Compression (EPC) on Peripheral Adaptations, Athletic Performance and Psychological Effects

ECP therapy research has positive effects in patients with coronary artery disease and angina. The use of EPC is a popular recovery modality among athletes. Aims of the 2 studies 1) to investigate the physio-psychological effects of ECP on healthy individuals 2) to determine the acute effects of EPC on anaerobic performance. 1) Twenty-five healthy individuals were randomly allocated into high-(3.0) psi or low-(0.5 psi) pressure groups and underwent two 15 ECP sessions. A submaximal run test before ECP (Pre), after first 15 ECP (Post-15), and after the second 15 ECP sessions (Post-30). Maximal oxygen uptake (VO_{2max}), ventilatory breakpoint (VT) and lactate threshold (LT), rate of perceived exertion (RPE), comfort and affect levels were measured. 2) Ten healthy males were recruited to complete 3 experimental trials. Participants completed two 30-seconds Wingate Anaerobic Test, on a cycle ergometer with a constant load of 0.075kg per kilogram of body mass, with a 20-min recovery period (passive recovery, active recovery or EPC treatment). Blood lactate

(BLa), heart rate (HR) and RPE were recorded. Power output (PO), fatigue index (FI) and total work were calculated.1) VO_2 at VT, time to VT and percentage of VO_{2max} at VT significantly increased after ECP intervention for both groups. 2) Mean PO following active recovery ($p = 0.022$) and EPC treatment ($p = 0.020$) were significantly higher than passive recovery. 1) Results indicated that ECP therapy had positive effects on human physiological functions without having detrimental psychological effects. 2) Performance was better maintained with the use of EPC and active recovery. Therefore, the use of EPC is a feasible alternative method when static recovery is desired. Athletes and healthy individuals may consider using ECP or EPC treatments as post-training/exercise recovery modality.

Prof. Dr. Verónica Violant-Holz
Board of Directors, The Foundation for Global Community Health (GCH)
President of II Internacional Congress in Health, Education and Research, UB, Spain
Department of Didactics and Educational Organization
Director of the International Observatory of Hospital Pedagogy
Faculty of Education, University of Barcelona (UB)
Spain

Prof. Dr. Verónica Violant-Holz, Master's Degree in General Health Psychology from Internacional University of La Rioja (UNIR), PhD in Psychology, graduated in Clinical Psychology from Comillas Pontificia University and in Education (BEd) from Ramon Llull University. She has been developing her career as a professor and researcher for more than 30 years in the fields of Creativity and Health in Hospital Pedagogy. She is the current President of ASOCREA-Creativity Association, Spain. She has also written over 40 books and chapters of books, several publications about care during childhood and adolescent in illness condition, and over 30 indexed articles that are available in databases such as JCR-Social Sciences Citation Index and the relative Index's. The editorial Aljibe (Spain) published under her direction five books collection about Hospital Pedagogy and a chapter of book in the Editorial Médica Panamericana. She coordinates the project from Octaedro editorial: Educate, growing in health. She is a member of the Group of Research and Innovation in Designs (GRID) Technology and multimedia and digital application to observational designs (Code: 2021 SGR 00718). Furthermore, she received the Diamond award in Research, from the World Wide Awards in Science Eureka in 2012 in Cuba. Three month visiting researcher in the Children's Physical Activity Research Group (CPARG), Arnold School of Public Health, University of South Carolina with Dr. Russell R. Pate, Ph.D. and Dr. Larry Durstine, Ph.D., Exercise Science Department Professors. She is a Latin-American and Caribian Parlament advisor.

Health-related Quality of Life During Hospitalization be Improved with Physical Activity Programs: A Spanish Perspective

The theoretical conception of this conference will be outlined from the Hospital Pedagogy's perspective. It is important to acknowledge the benefit of the implementation of these strategies for the prevention and promotion of quality of life in people with health conditions or that is at risk of being hospitalized, that is the case in children and adolescents with congenital heart disease (CHD). Body-awareness as a human dimension is one of our greatest allies in the contexts of hospitalization and convalescence. The new paradigm is based on a health concept defined by Boers and Jentoft in 2015 as the resilience or capacity to cope, and to maintain and restore one's integrity, equilibrium, and sense of wellbeing in three domains: physical, mental, and social. One of the important issues is

to promote physical activity and healthy habits in hospitalized children and during the illness process. In this conference, on the one hand, it explores the extent to which children and adolescents with congenital heart disease have the same educational and socialization opportunities as their healthy peers, and explains from research carried out in Catalonia, Spain. On the other hand, it is important to acknowledge the main benefits of the implementation of these best practices to prevent and promote the quality of life in people that are hospitalized or convalescence at home for health reasons including the promotion of physical activity in hospitalized children. In order to identify the best practices in physical activity programs develop in the hospital to promote quality of life, on this chapter the results to answer this research question it is presented: How can health-related quality of life during hospitalization be improved with Physical Activity programs?

Prof. Dr. Ming-Kai Chin, PhD, MBA
Founder and President, The Foundation for Global Community Health (GCH)
Founding & Immediate Past President, BRICS Council of Exercise & Sports Science (BRICSCESS)
Co-Founder & Former President
Asian Council of Exercise & Sports Science (ACESS)
Vice President, Global Affairs & Research
HOPSports Inc., USA (2010-2022)
Hong Kong-China

Prof. Dr. Ming-kai Chin received his Ph.D. in Exercise Physiology from the University of Wisconsin-Madison, USA in 1985. Previously, Dr. Chin served as the Head of Sports Science at the Hong Kong Sports Institute; Head and Principal Lecturer, Department of Physical Education and Sports Science at The Education University of Hong Kong (former Hong Kong Institute of Education); and Professor, School of Kinesiology, Allied Health and Human Services, University of Northern Iowa, USA. Prof. Chin is the Vice President of Global Affairs and Research, HOPSports, Inc., USA (2010-2022). Prof. Chin's research interests lie in integrated and holistic approaches to promote active living in schools and communities through interdisciplinary approaches. An editor of eight books and author of 200 publications in scientific and sports journals in English and Chinese, Prof. Chin has given 205 keynote and invited presentations, and 90 conference presentations around the globe. A Fellow of AIESEP and Research Consortium of SHAPE America, he is one of the four Founders and Past-President of the Asian Council of Exercise and Sports Science (ACESS), and former Editor-in-Chief of the Asian Journal of Exercise & Sports Science (AJESS) (2001-2015). As the senior editor, Prof. Chin co-edited the book Physical Education and Health: Global Perspectives and Best Practice which solicited scholars from 40 countries to contribute chapters concerning new directions for physical education and health in their respective countries. In April 2015, Prof. Chin was awarded the Medal of Manuel Gomes Tubino by FIEP (Fédération Internationale d'Education Physique) for his contribution of global work in physical education. He is the Co-Founder and Immediate Past-President of the BRICS Council of Exercise & Sports Science (BRICSCESS) and is the Founder and President of The Foundation for Global Community Health (GCH) promoting the United Nations 17 Sustainable Development Goals (SDGs). In February 2024, Prof. Chin received the first and only BRICSCESS President's Award in Delhi, India.

Brain Breaks: Classroom Teaching and Learning, Research Application to Promote Health and Well-Being with Global Perspectives

Physical activity (PA) is considered an essential determinant for improving quality of life, adding to a healthy lifestyle, and reducing chronic disease risk. In addition, the scientific literature does demonstrate in children that PA significantly influences various measures of cognitive performance and academic achievement. In recent years, educational technology tools are gaining greater classroom utilization to facilitate teaching, learning, and behavioral change. For instance, technology using online video streaming such as those videos from HOPSports Brain Break®, which is supported by The Foundation for Global Community Health (GCH) with content that is consistent with the Whole School, Whole Community, and Whole Child (WSCC) Guidelines and the 17 United Nation Sustainable Development Goals (UNSDG 17), were created to boost children's PA participation. Brain Breaks® videos are designed as a classroom tool/activity that is additive to the school's regular physical education curriculum and has been adopted by 70 countries. Brain Breaks® research describes that breaking up sit-time with short periods of PA during the school day contributes to improved student attention, enhanced knowledge acquisition, general alertness, on task behaviors, self-awareness, and PA engagement. Brain Breaks® research also demonstrates improved children's academic understanding of music, language, culture, art, and most importantly maintaining behavioral change. In this presentation, research surrounding the use of classroom Brain Break® does promote physical, social and emotional health, and safety through student participation, and the dissemination of scientific evidence combined with culturally relevant customs for school-based intervention strategies is summarized.

Prof. Dr. Stephen KOPECKY, M.D., FACC, FACP, FAHA, MASPC
Past President, American Society for Preventive Cardiology
Professor of Medicine
College of Medicine, Mayo Clinic
USA

Prof. Dr. Steve Kopecky, MD is a cardiologist at Mayo Clinic. After graduating from Trinity University, he attended the University of Texas Medical School in Houston followed by internal medicine in cardiology training at Mayo Medical School. Dr. Kopecky started in Mayo's Cardiac Catheterization Laboratory doing interventional procedures and in the Coronary Care Unit treating myocardial infarctions. He is now focused on cardiovascular disease prevention and is the Director of the Statin Intolerance Clinic. He has written numerous articles for peer-reviewed journals and has received multiple "Teacher of the Year" awards from Mayo's Division of Cardiovascular Diseases and the Department of Internal Medicine and is active in clinical research and education, providing mentorship and training to residents and fellows. His research interests include the role that lifestyle, including diet, exercise, and proper nutrition plays in risk prediction and the development of cardiovascular disease. He is also the author of the best-seller book on lifestyle tips to reduce heart disease "Live Younger Longer". Dr. Kopecky is a Past President of the American Society for Preventive Cardiology and is the 2013 recipient of the Jan J. Kellermann Memorial Award given by the International Academy of Cardiology for distinguished work in the field of Cardiovascular Disease Prevention.

Lifestyle Benefits on Reduction in Chronic Disease and Mortality

Cardiovascular disease is now the leading cause of both death and premature death worldwide. Lifestyle is the leading risk factor for early cardiovascular disease, and it is estimated that 80-90% of our health is primarily based on individual lifestyle. Over the past 15 years there has been a marked increase in metabolic risks (High blood sugar, elevated LDL-cholesterol, systolic blood pressure, increased Body Mass Index, low bone mineral density, & kidney dysfunction) that have led to a marked increase in CV death rates worldwide. All of these risk factors are directly related to lifestyle. There is clear evidence that lifestyle habits developed at an early age are critical in determining later life occurrence of CV risk and disease. It has also been shown that the healthy habits surrounding nutrition, physical activity, sleep, and social support/stress management are key to minimizing the risk for many of the chronic metabolic diseases (obesity, metabolic syndrome, diabetes, hypertension, renal failure, hyperlipidemia, & sleep apnea).To achieve this, an interdisciplinary approach including teamwork and integration between the education, healthcare, food system, and exercise industries will be required. New healthy food options along with opportunities for safe physical activity will be essential. The Lifestyle and Sports Medicine fields must be positioned to lead this lifestyle transformation via population, government, and industry education.

Prof. Dr. Ida Fatimawati bt Adi Badiozaman
Deputy Pro Vice-Chancellor (Research)
Swinburne University of Technology, Sarawak Campus
Malaysia

Prof. Dr. Ida Badiozaman is Deputy Pro-Vice Chancellor (Research) at Swinburne University of Technology Sarawak, where she leads research innovation and academic excellence. An award-winning multidisciplinary researcher, Prof. Ida is driven by issues of equity, inclusion, diversity, and access and has led transformative research projects in collaboration with government, industry, and higher education partners. She is part of the team for the “Building Connections for Enterprising Women” project, which received several accolades, including ‘Highly Commended’ for the Vice-Chancellor’s Research Excellence Award 2018, First Place for the Swinburne Research Impact Award 2019, and ‘Highly Commended’ for the Emerald Interdisciplinary Impact Grant 2019. In 2020, Prof. Ida won the United Nations’ WEP Award for Community and Industry Engagement, and in 2021, she received the Special Recognition Award from the Chief Minister of Sarawak for her contribution to education. In 2022, she was featured in the book, Sarawak Women in Scholarly Writing. As a leader in research, Prof. Ida plays a pivotal role in shaping Swinburne Sarawak’s research agenda, fostering partnerships, and driving global research impact. Her visionary leadership and commitment to advancing research excellence and gender equity have cemented her as a leading and influential figure in academic and industry circles.

Developing Sarawak Social Well-Being index: Conceptualization, implementation, and Findings.

Measuring and monitoring social well-being is crucial for achieving holistic development, as it provides a comprehensive understanding of the population's quality of life beyond economic indicators. National-level well-being indexes offer governments essential data to assess citizens' well-being across multiple dimensions, including health, education, income security, and social inclusion. These indexes support policymaking, track progress, and pinpoint areas requiring intervention to improve overall societal welfare. The theoretical foundation of these indexes is often rooted in frameworks of social capital, human development, equity, and the social contract between the government and the public. The Malaysian Government conducts an annual Well-Being Index (MyWI) to measure the well-being of Malaysian based on 5 economic and 9 social indicators. Due to disparities in socio-demography that characterize populations in West Malaysia and the eastern Borneo states of Sabah and Sarawak, the Sarawak government embarked on its own Sarawak Social Well-Being Index (SSWI) in 2021, to monitor social progress and to inform policies aimed at enhancing the well-being of its citizens. This presentation will highlight the conceptual underpinning of the SSWI and the key findings from the 2023 SSWI Survey, which identified strengths, such as high levels of community participation, alongside challenges in mental health and income inequality. The insights gained have policy implications for targeted interventions in healthcare, education, and social services. Overall, the SSWI is accepted by the government as a critical tool for policymakers, ensuring Sarawak's development strategies are aligned with the needs and aspirations of its diverse population.

Invited Speakers

Prof. Dr. Mario IMSON, RPT, MD
Past President and Co-Founder, ACESS
Orthopedic Surgery- Sports Medicine
Baguio Medical Center
Philippines

Dr. Mario Imson, MD is a practicing Orthopedic Surgeon with a sub-specialty in Sports Medicine. He obtained his Bachelor of Science in Physical Therapy from the University of the Philippines and subsequently his medical degree from the University of the East Ramon Magsaysay Medical Center. He topped the licensure examination for Physical Therapist and completed his training in Orthopedic Surgery at the Philippine Orthopedic Center. Dr. Imson has served as a faculty member of the College of Human Kinetics and at the same time the sports physician of the University of the Philippines, where he established the university sports injury clinic, and the Philippine Basketball Association, the professional league of the Philippines. He was also the Dean of the College of Physical Therapy of Dominican College and the University of Baguio and a faculty member of the University of the Cordilleras. He is currently a consultant in Orthopedic Surgery and the supervising physician of the rehabilitation section of the Baguio Medical Center. As one of the four founders of Asian Council of Exercise and Sports Science (ACESS), he has chaired the organizing committee for the 2005 and 2019 Southeast Asian Games Scientific Conference. He has served as ACESS president in 2009 – 2011 and 2017 – 2019. Dr. Imson, who is the immediate past president of the University of the Philippines Alumni Association for Northern Luzon, has delivered lectures in various national, regional and international conferences on sports medicine.

Medical Implications of Youth Participation in Sports: A Philippine Perspective

A significant number of children are in competitive as well as recreational sports activities despite the many who are less physically active or sedentary due to their preoccupation to electronic gadgets. We are still witnessing young athletes getting involved in organized sport activities at an early age. Young athletes however must be given a special attention as they may be considered unique. Their uniqueness in participation in sports may be in terms of physiological, psychological and anatomic make-up. The effects of training may likely affect not only their musculo-skeletal development but also their total development which may have long-term implications into adulthood. Traumatic injuries on the developing structures on young may thus have life-long consequences if proper training measures and techniques for young athletes are ignored. In terms of their musculo-skeletal development there are unique injuries in this age group which are totally different from their adult counterparts. The mechanisms of trauma result to specific injuries that may have a different clinical presentation in different age groups in children and adolescents. This paper shall describe these injuries, their clinical picture or presentation, and the unique physiological process of healing in children and adolescents together with the current trends of management to facilitate their return to previous level of activities. More importantly the paper presents points for the safe sports participation of the young athlete. To fully appreciate these special concerns clinical cases of actual injuries are presented. Likewise probable effects on the structural and functional capacity of the child and their long term implications shall be presented. Preventive measures are also discussed with the intention of making sports participation and physical activity safer and more enjoyable among children and young adults.

Prof. Dr. Aymeric Guillot
Honorary Member of the Institut Universitaire de France
Laboratoire Interuniversitaire de Biologie de la Motricité
University Claude Bernard Lyon 1(UCBL)
France

Prof. Dr. Aymeric GUILLOT is a full Professor at University Claude Bernard Lyon 1, further named at the Institut Universitaire de France (2011-2016). He is currently the co-director of the Inter-University Laboratory of Human Movement Sciences. By exploring the neurophysiological basis of motor imagery using physiological recordings as well as behavioral markers, his research focuses on the effects of motor imagery on motor performance and motor recovery. Three main aspects are considered: A) determining the optimal condition of imagery use to improve motor skill learning, B) evaluating the effectiveness of motor imagery in promoting motor recovery both in injured athletes and patients with motor disorders, and C) examining the sleep-related effects for motor consolidation after imagery practice. Further, he investigated the neuroplasticity induced by motor imagery as well as how thoroughly and appropriately assessing the accuracy and vividness of the imagery experience. His work notably contributed to refine the best rules of motor imagery practice and the main key-factors that should be controlled to ensure its efficacy. A second challenge was to understand how motor imagery might facilitate the recovery of motor functions and improve both functional mobility and patients' quality of life. This line of research provided clear evidence that motor imagery contributes to promote muscle and joint recovery, or limit strength loss. Further publications showed that motor imagery learning could benefit from the consolidating effects of sleep, thereby reinforcing the principle of functional equivalence between imagery and actual execution. Novel experimental data acquired in neuroimaging are the subject of an article exploring the neurophysiological correlates of this consolidation. More recent work questioned the combined contributions of these methodologies and are the focus of pilot experiments on the enrichment of motor imagery with neurofeedback combining magnetencephalography and electroencephalography.

The Neurofunctional Architecture of Motor Imagery: Theoretical Foundations and Practical Applications

The ability to mentally simulate sensations, actions, and other types of sensory and motor experiences, is certainly one of the most remarkable capacities of the human mind. Imagining an action is however more complex than it appears at first glance, due to the concealed and multifaceted nature of this imagery experience. In this presentation, we will first provide an overview of the abundant literature considering the neurophysiological underpinnings of motor imagery, and more specifically the neurofunctional equivalence between motor imagery and the corresponding actual execution. Investigating the neural underpinnings of imagined goal-directed actions has been an overarching aim of cognitive brain research, and although the neural networks mediating motor imagery and motor performance are not strictly similar, we will provide compelling evidence that these two forms of practice engage overlapping cerebral substrates. We will then develop the main imagery outcomes likely to be achieved by athletes or patients and question the main corresponding recommendations and guidelines structuring effective motor imagery interventions. In particular, we will discuss the multiple applications in sport sciences and clinical settings, and the converging evidence that motor imagery positively contributes to promote motor learning and improve motor recovery. In light of the findings that have emerged from the recent scientific literature, we will also summarize the unsettled issue of some influencing variables and consider the new directions contributing to determine the optimal conditions of motor imagery practice, depending upon the targeted imagery outcomes.

Assoc. Prof. Dr. Arja SÄÄKSLAHTi
Chair, AIESEP 2024
Faculty of Sport and Health Sciences
University of Jyväskylä
Finland

Assoc. Prof. Dr. Arja Sääkslahti is a board member of the International Organization for Physical Education in Higher Education (AIESEP), a global community that serves professionals in the areas of sport pedagogy and physical education (PE). Dr Sääkslahti has led AIESEP's Early Years Special Interest Group between 2016-2024 with the mission of increasing research-based knowledge about the importance of physical activity and physical education to young children's holistic development and overall well-being. She also organised the AIESEP 2024 international conference in Jyväskylä, Finland. She completed her master's degree in sport sciences at the University of Jyväskylä (JYU) and worked for six years as a physical education teacher before finishing her PhD studies and earning her PhD thesis 2005. Currently, she leads the PE teacher education discipline at JYU. Together with the Finnish sport aid organisation LIIKE (https://liike.fi/), her team supports physical education in Tanzania and PE teacher education in Tanzania and Zimbabwe through a variety of projects. Dr Sääkslahti has been active in different international associations and networks including CEREPS, CIAPSE, ECSS and IMDRC. Because she wants to have a positive influence on society, she is a member of several national working groups (e.g. national advisory groups on PE curricula, Physical Activity Recommendations and the Finnish Physical Activity Report Card for different age groups) and has served as a board member of the National Olympic Committee (2016-2020). She has been principal investigator in large national follow-up research projects such as the Skilled Kids project and the Active Family and JOYPAM projects.

Positive Motor Competence Predicts Physically Active Childhood and Adolescence: The Finnish Perspective

Children's motor competence increases with age. The more competent children are, the more physically active they become. Unfortunately, many studies have shown that children's physical activity begins to decrease at the time obligatory schooling begins. One reason for this phenomenon is that children begin to compare themselves to their peers in terms of academic and sport performance. The resulting perception of their motor competence can negatively affect their motivation to participate in physical activities, and the spiral toward less activity and decreasing opportunities to learn new motor skills decreases their total physical activity. Recent research has shown that the early years (3 to 6 years of age) are very important for developing positive perceived motor competence to maintain the joy of movement and ensure continued motivation to participate in a variety of physical activities and a physically active lifestyle. In addition, the latest research results have revealed that when a child develops a low and negative perception of his or her motor competence, it tends to remain low and persists in later childhood, adolescence and even adulthood. The first influencers in a child's life are the parents and other family members. A lot of 'tummy time' and active playing with other infants and children are needed to develop muscle strength and appropriate body posture. Independent moving and handling objects increase the joy of movement and offer opportunities for cooperative play with others. When parents spend time playing with their child, it is valuable in terms of helping the child build a positive self-image. In this presentation, the global motor competence levels of children will be presented and discussed within a framework of children's self-perceptions of their own competence and physical activity.

Prof. Dr. Ke Zhou
Vice President, ACESS
Board of Directors, BRICSCESS
Dean, School of Physical Education & Sports
Henan University
China

Prof. Dr. Ke Zhou received Master and Docter degree in Physical Education and Sports Training from Henan University, China. He completed his Postdoctor research in The University of Texas at Austin, USA. Dr. Zhou's research interests lie in the field of Development of physical education teachers and adolescence health promotion. He has published 11 academic monographs, which includes textbooks on PE curriculum of primary and middle school and translated two books. Almost 60 papers were published in professional journals such as Research Quarterly for Exercise and Sport, Journal of Teaching in Physical Education, China Sport Science and Journal of the Chinese Society of Education. In addition, he has served as the main lecturer for the national resource sharing course "Research on Curriculum Standards and Textbooks for Junior High School Physical Education and Health". He has also served as the main lecturer for the "New Physical Education Curriculum Training", "Volunteer Education Project", and "Training of Middle School Physical Education Backbone Teachers" in Henan Province multiple times. He is an expert in the evaluation and interpretation group of the "General High School Physical Education and Health Curriculum Standards" of the Ministry of Education. Also, Dr. Zhou has given over 30 invited presentations at conferences which were organized by International Council of Sport Science and Physical Education, Society of Health and Physical Educator and Chinese Sport Science Society.

Priority Development of Youth Physical Education & Sports in China: Legal Support and Development Path

The 35th Session of the Standing Committee of the 13th National People's Congress voted to adopt the newly revised Sports Law, which prioritizes the development of youth physical education (P.E.) and sports in China. Article 10 of the General Principles specifically emphasizes the state's commitment to the advancement of youth and school P.E. and sports, ensuring a clear developmental path and enhancing the operational feasibility of related policies. (1) Focus on Learners: Emphasizing that learners are central to quality P.E., policies are directed towards acknowledging the diversity and unique needs of individuals. Special attention is given to ensuring that disadvantaged, marginalized, and special groups have equitable access to P.E. rights. (2) Importance of Curriculum for quality P.E.: The core principle of quality P.E. curriculum construction points to a gradual and sequential curriculum with clear and defined goals and learning outcomes. (3) Essential Role of Process: By paying attention to the process and continuously improving the quality of P.E. The newly revised Sports Law stipulates that "schools shall include extracurricular sports activities carried out on campus in their teaching plans". (4) Teachers are the concrete executors of quality P.E.: The supply of quality P.E. largely depends on whether there is a group of excellent teachers who can cope with and manage changes. (5) The environment is the executive guarantee for the development of quality P.E.: it pertains to a secure natural and social setting that enables safe and healthy teaching and learning experiences. (6) Building good partnerships is an effective connection for the development of quality P.E. Recognizing the value of collaborative relationships in advancing quality P.E., the development of cooperative partnerships among various stakeholders is crucial in achieving a common vision.

Distinguished Prof. Emeritus Dr. J Larry DURSTINE, FACSM, FAACVPR, FNAKi
Editor-in-Chief Sports Medicine and Health Science
Distinguished Professor Emeritus
Department of Exercise Science
University of South Carolina
USA

Prof. Dr. J. Larry Durstine is a Distinguished Professor Emeritus in the Department of Exercise Science at the University of South Carolina and is presently Editor-in-Chief of the journal Sports Medicine and Health Science. Dr. Durstine earned his Ph.D. in Exercise Physiology and Biochemistry and Medical Physiology from the University of Toledo and The Medical College of Ohio at Toledo. He has published over 110 peer-review original research manuscripts, has written-edited nine professional books, and authored more than 40 book chapters. Dr. Durstine has several primary research interests. His early career research area was in the evaluation of physical activity, regularly practiced exercise, and the impact of a single exercise session on cardiovascular risk factors. Specific interests were in blood lipid and lipoprotein concentrations, and novel cardiovascular disease risk factors such as C-reactive protein and Lp(a). Throughout his career, Dr. Durstine has sought to better understand the role of physical activity and prescribed exercise in chronic diseases management. Thirty years ago, physical activity and exercise were thought to impact twenty-five different chronic diseases. Now, more than 90 diseases are known to be affected by physical activity and prescribed exercise. For most diseases, daily physical activity and prescribed exercise reduce disease risk by impacting primary disease prevention and secondary disease treatment. In recent years, Dr. Durstine has worked with an international coalition of scientists to determine the effectiveness of Brain-Breaks® video programming on health-related outcomes among school children. Dr. Durstine is committed to daily physical activity and exercise, ran competitively in high school and college, and continues every day to exercise for “the health of it.”

Reducing Chronic Disease Risk in Southeast Asia Through Sustained Physical Activity and Exercise Globally, chronic diseases such as cardiovascular disease, diabetes, obesity, and cancer are increasing. A primary focus of the World Health Organization (WHO), especially in Asia and China, is to promote healthy lifestyles that reduce chronic disease. As chronic diseases rates continue to increase, WHO is exerting a greater focus in promoting comprehensive lifestyle management plans to reduce disease risk. Chronic diseases excerpt enormous economic and public health tolls, but prescribed exercise and daily physical activity (PA) are low-cost positive lifestyles enhancing both primary disease prevention and secondary disease treatment by reducing disease risk. In the last twenty years, vast amounts of positive scientific evidence support exercise and daily PA programming as an essential part of the disease medical management plan. In fact, the American College of Sports Medicine 18 years ago developed an international program health promotion program titled Exercise is Medicine. A growing concern is that children now suffer from chronic diseases such as type 2 diabetes that once were considered adult diseases. Adolescents currently encounter chronic diseases earlier in life having a lasting legacy of unwanted adverse health throughout life. This presentation provides information regarding the increasing incidents for chronic diseases, the health benefits of exercise and daily PA, and the need to sustain physical activity and exercise across the lifespan in order to reduce chronic disease risk globally including Southeast Asia.

Lisa Wickham
President & CEO, Imagine Media International Limited (IMIL)
President, Imagine Media Africa (Pty) Ltd.
Founder, Caribbean Film & Media Academy™ (CFMA)
Founder, Teen Creators Academy™ (TCA)
Co-Founder SOKAFIT® (Health & Fitness System)
Co-Founder, Cross Continental Forum (CCF)
Trinidad and Tobago

Lisa Wickham, MBA (Distinction) brings a rare and powerful blend of creative vision, executive leadership, and academic collaboration. With over 50 years in the creative sector, having started on national television at the age of six, she has built a successful international career producing and directing films, TV shows, documentaries, music videos, and large-scale live events while leading public and private sector initiatives and mentoring emerging talent. In 2015, Lisa co-created SOKAFIT® as a fitness television show, merging structured exercise with the rhythms of Soca music, the national sound of Trinidad and Tobago. She led the evolution of the concept into a comprehensive health and fitness system by collaborating with a multidisciplinary team of sports scientists, choreographers, dancers, doctors, nutritionists, and fitness professionals. Under her direction, SOKAFIT® was rigorously tested, refined, and developed into a coach training and certification framework to ensure quality and sustainability. Since then, it has engaged schools, communities, companies, gyms, international fitness events and television shows, and expanded internationally with coaches trained in South Africa, the French Caribbean, Canada, and Australia. Beyond SOKAFIT®, Lisa is the President & CEO of Imagine Media International Limited and Founder of the Caribbean Film and Media Academy, with partnerships spanning the Caribbean, Africa, Europe, North America, and Asia. She has also served as CEO of the state-owned TTT Media Network in Trinidad and Tobago and has held senior leadership roles in academia and international development. Lisa holds a BSc (Hons) in Management from The University of the West Indies and an MBA with Distinction from Warwick Business School, UK, with further executive and creative studies at Oxford, IIM Ahmedabad, Vienna University, London Film Academy, and EAVE.

Balancing Creativity and Scientific Validation: The Evolution of the SOKAFIT® Fitness System

SOKAFIT® is a dynamic health and fitness system, originated in Trinidad and Tobago, a nation of just 1.4 million people where national identity is deeply tied to music and dance. Rooted in the vibrant rhythms of Soca music, SOKAFIT® began as a television show. Its evolution into a structured training system reflects both the creative spirit of its origins and the disciplined integration of sports science. As Co-Creator, I worked with a multidisciplinary team including a sports scientist/exercise physiologist, choreographer, dancers, and medical and wellness professionals to shape an ecosystem that balanced cultural creativity with rigorous testing, reformulation, and validation. Together, we also developed a coach training and certification framework to support quality delivery and long-term sustainability. Rollout efforts included SOKAFIT® School Tours, Community Burns, and national fitness events, embedding movement into schools and communities and emphasizing participation among children and youth. International expansion has included the training of 26 coaches in South Africa, alongside others from the French Caribbean, Canada, and Australia. SOKAFIT® was also integrated into El Desafío (Survivor, Spanish version, broadcast in 59 countries) and presented at international events and regional sport science conferences. Like many cultural innovations seeking global adoption, SOKAFIT® has faced challenges of fidelity and adaptation. While some coaches pursued independent, non-scientific versions, the South African coaches remain aligned, and the sports scientist continues to advocate for evidence-based practice. These experiences reinforce the importance of quality assurance, peer review, and careful adaptation across diverse cultural and

educational contexts. This presentation shares the successes and setbacks of SOKAFIT®, offering insights into the ongoing tension between rapid market implementation and the slower but essential processes of validation and academic review.

Symposium Speakers
Symposium 1

Prof. Dr. Erika ZEMKOVÁ (Chair)
Department of Biological and Medical Sciences
Faculty of Physical Education and Sport
Comenius University in Bratislava
Slovakia

Prof. Dr. Erika Zemková is a professor in the Department of Biological and Medical Sciences, Faculty of Physical Education and Sport, Comenius University in Bratislava. She also worked as a researcher in the Technological Institute of Sports, Faculty of Electrical Engineering and Information Technology, Slovak University of Technology, as well as the Faculty of Health Sciences, University of Ss. Cyril and Methodius in Trnava. She completed her master's degree in professional Coaching in 1994, and Doctoral Degree in Sports Kinanthropology in 1999. In 2004, Slovak Academy of Sciences awarded her the Scientific Qualification Degree IIa – Independent Scientist. In 2007, she became Associate Professor and in 2013 Full Professor of Sports Kinanthropology. In 2008, she graduated at the Institute of International Relations and Law Approximation, Faculty of Law, Comenius University in Bratislava. She has received fellowships for conducting research at foreign universities, including the Ronald and Eileen Weiser Professional Development Award (University of Michigan, 2009), Fulbright Award (NeuroMuscular Research Center at Boston University, 2005–2006), Aktion Österreich–Slowakei Stipendium (University of Vienna, 2005), NATO Expert Visit Award (University of Aberdeen, 2005), CIMO Fellowship (Research Institute for Olympic Sports in Jyväskylä, 2003), and for teaching activities through the Erasmus Program and bilateral agreements between Universities (2004–2013). She was awarded by Coventry University Research Committee to be a Visiting Professor in Physical Education and Sport at the Faculty of Health and Life Sciences, Coventry University (2012–2015). Her scientific and academic work was noted for merit by her home Faculty of Physical Education and Sport in 2011 and 2012 (Associate Professor of the Year) and 2019 (Professor of the Year), and also by Comenius University in Bratislava in 2018 for her outstanding work in the field of functional diagnostics of athletic performance.

Importance of Functional Assessment of Postural and Core Stability in Sport and Rehabilitation

Static and dynamic posturography are typically used to assess postural stability under either stable or unstable conditions. These force plate based systems measure the vertical ground reaction force and provide a means of calculating the center of pressure (CoP). The main disadvantage of force platform analysis is that it measures the secondary consequences of sway movements, not the movement of the center of gravity itself. To overcome this shortcoming, one can measure the movements of the center of mass (CoM) using an inertial sensor system located on the trunk. This provides several possibilities of use in practice. One of them are dynamic balance tests where CoP and CoM are registered while standing on an unstable base, for example a foam mat or a portable spring-supported platform. Another alternative is perturbation-based balance tests, where external perturbations are applied directly to the body by pushing/pulling the trunk, arms, or pelvis. Others are task-oriented balance tests consisting of a visually guided CoM tracking task or a visually guided CoM target-matching task, where subjects are given visual feedback on CoM displacement. The visually triggered step initiation test also comes into consideration, where the speed of step execution is measured concurrently with CoP and CoM trajectories. Such assessment of postural and core functioning is a critical component of a testing battery in sports and rehabilitation. By providing

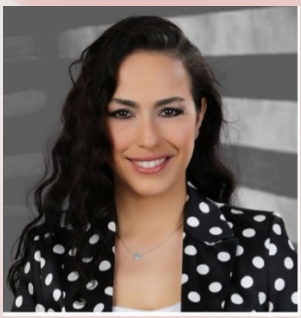
simultaneous measurement of CoP and CoM, practitioners can more effectively create targeted exercise programs aimed at improving performance and preventing back problems.

Assist. Prof. Dr. Siriporn Sasimontonkul
2nd Vice President, ACESS
Former Dean, Department of Health and Movement Sciences
Faculty of Sports and Health Science
Kasetsart University
Thailand

Asst. Prof. Dr. Siriporn Sasimontonkul earned a Ph.D. in Biomechanics from Oregon State University and a M.Sc. in Exercise Physiology from Mahidol University. She established faculty of sports science, Kasetsart University, since 2005 and served as its dean during 2006 – 2009 and 2014 – 2023. She also established both undergraduate and graduate curricula related to Sports Science, Athletic Training and Movement Science. She has been the vice president of Asian Council of Exercise and Sports Science, the chair of consortium for the dean of faculty of Sports Science and Physical, and a subcommittee of house representative to establish the act on national sports scientist accreditation. She collaborated with the ministry of health to establish national physical activity guidelines. She also conducted projects with various agencies to implement physical activity for wellness tourism in the communities, and to invent wearable products equipped with sensors for assisting individuals with movement problems and the fall prediction. Her research interests include biomechanical analysis with special emphasis on movement analysis to detect abnormal movement and injury mechanism, and an exercise prescription for bone health. From her research experience, she set up a sports science center and team to assist elderly, individuals with disease and musculoskeletal injuries regaining their healthy status and functional movement through an integration of health and movement evaluations, exercise prescription, functional rehabilitation, and performance development.

The Medial Longitudinal Arch Collapse During Running is Related to Muscle Activation of the Lower Limb

Muscle activation controls movement and function of body segments. The adolescents' abnormal structure of the foot, especially flexible flatfoot (FF), may also be associated with less muscle activation. Flexible flatfoot is a less rigid medial longitudinal arch (MLA) which is common in children. Moreover, there was an association between obesity and flat feet among 3-18 years old children, which 4 – 75 percents of overweight children developed flat feet. FF will either disappear during the MLA development at the 6 years of age or persistent. The collapse of MLA from the weight bearing load will stretch the plantar fascia repetitively leading to plantar fasciitis after the prolonged PA engagement. The rigidity of MLA is dependent on the foot muscle strength; however, an abnormal movement of the lower limb also associates to the collapse of the MLA. An overpronation of the ankle leads to the MLA flattening. Nevertheless, the peroneus longus of the pronated feet runners was about the same size as that of the normal foot runners. Hence, peroneus longus may not be the major contributor of pronation and the dynamic collapse of MLA. In addition, conflicting evidence regarding the association of lower limb kinematics and kinetics with MLA drop has been exist. Therefore, we investigated the contribution of muscle activation and lower limb movement to the MLA collapse among the FF adolescent and young adults. The electromyography of the leg muscles and 3-dimensional motion of the lower limbs revealed that the MLA collapse was associated with muscle activation. The repetitive collapse of MLA could further induce plantar fasciitis. The results will be presented and discussed in more detail.



Assoc. Prof. Demet Tekin, PT., Ph.D.
The Physiotherapy and Rehabilitation Department
Faculty of Health Sciences
Istanbul Rumeli University
Turkey

Assoc. Prof. Dr. Demet Tekin, PT, Ph.D. is recognized as the first Dance Physiotherapist in Turkey. Now, she is working at Physiotherapy and Rehabilitation Department, Faculty of Health Sciences in Istanbul Rumeli University. Tekin holds two master's degrees and a PhD in Sports Science, with expertise in a variety of sports disciplines such as football, volleyball, basketball, tennis, swimming, rowing, motorsports, and dance. In addition to his academic career, Tekin has nearly 20 years of experience in dance, focusing particularly on injury prevention, protective rehabilitation, and performance enhancement for dancers. Through his scientific publications on these topics, he has made significant contributions to the field. His work in the therapeutic use of dance for neurological, pediatric, and geriatric patients is also noteworthy. With 17 years of professional experience in Flamenco dancing, Tekin teaches both at his own dance academy and at other dance schools. In October 2023, he chaired the 1st International Dance Sciences Congress, which was held under the theme "Health in Dancers and Dance in Health," bringing together many scientists in the field. Having personally experienced the physical and psychological healing effects of dance, Tekin is committed to sharing these benefits with others. He takes great satisfaction in leading workshops and specialized training sessions, where he teaches both the theoretical and practical aspects of dance. Tekin continues to work towards improving the quality of life for individuals and communities through his ongoing research and initiatives.

Prevention of Injuries in Dancers – Preventive Rehabilitation

Dance is a high-risk activity that can lead to various musculoskeletal injuries, depending on the type of dance. This art form requires deep concentration and necessitates a correct understanding of technique to maximize the benefits of one's body while minimizing the risks of injury. Consequently, many injuries experienced by dancers are similar to those observed in athletes. The mechanisms of dance, anatomical posture, inadequate training, technical errors, nutritional deficiencies, the dancer's psycho-physical state at the time of injury, and environmental factors (such as flooring, shoe type, lighting, and temperature) can expose individuals to various injuries. In high-performance dance activities, untreated injuries can create new risks due to different pathologies. Therefore, it is crucial to conduct specialized studies for dancers. Accurately diagnosing, treating, and preventing dance injuries requires specific skills and clinical expertise. Topics such as screening, exercise, nutrition, flooring, rest, and the mechanics of dance should be carefully addressed. Tekin, a physiotherapist, dancer, and dance instructor, is delighted to share his work on preventing injuries and enhancing healthy performance among dancers across various platforms. He believes in the necessity of acquiring more knowledge about Dance Science, which heals both the body and the spirit, and advocates for special studies in this field.

Dr. Jogbinder Singh
Former Personal Assistant to Minister Youth Affairs & Sports, Govt. of India.
Former Assistant Professor Physical Education ACPE, Punjabi University-Patiala
Former Sports Scientist, Department of Exercise Physiology, Sports Authority of India.
Director, Physical Education & Sports
Govt. Degree College Mahanpur, Kathua
Department of Higher Education, UT of J&K
India

Dr. Jogbinder Singh Soodan received his Ph. D in Sports Science from Department of Sports Science and Physiotherapy, Punjabi University- Patialain 2012. Dr. Soodan previously served Personal Assistant to Union Minister for Youth Affairs and Sports, Govt. of India (2008-2009). Dr Soodan also served as Sports Scientist during CWG-2010, Asian Games 2012 in the Department of Exercise Physiology, Sports Authority of India, Netaji Subhas National Institute of Sports, Patiala (2009-2014) and Assistant Professor in Physical Education at ACPE Mastuana Sahib, Punjabi University Patiala (2014-2018). Dr. Soodan was nominated by the Vice Chancellor as the member of board of studies for Education and Information Sciences at Punjabi University Patiala Punjab India (2016-2019). Dr J S Soodan is the editor/co-editor of five books and the author of more than 60 Publications in UGC approved Scientific and Sports Journals in English. Dr J S Soodan has given over 15 Invited Presentations and over 70 Conference presentations in India and Abroad. Dr Soodan has authored two books in Hindi and Two books in English. Dr J S Soodan has received Most Outstanding Sports Science Innovator and Leader Award on 18-11-2023 at the Ist International Eminence Awards conferred by International Association of Physical Education and Sports (IAPES) Inc. Thailand. Dr Soodan has guided Research Scholars for Master Degree Dissertation at Sports Authority of India and also for Two Years Masters in Physical Education (M.P.ed) Course at Punjabi University Patiala Punjab. Dr Soodan is life member of National Association of Physical Education and Sports Science (NAPESS), Member Editorial Board of Journal of Exercise Science and Physiotherapy (JESP), Professional Member International Organization in Health Sports Kinesiology (IOHSK). Life Member International Association for Computer Science in Sports. Presently working as Physical Director/PTI at Department of Higher Education, Union Territory of Jammu & Kashmir, India.

The Neuro-physiological Analysis of Selected Nerves in Indian Athletes

Given the importance of Nerve Conduction Velocity in athletic performance and in the activities of daily living, its assessment should be considered an integral part of functional diagnostics. Above all, such testing should differentiate between athletes with different demands on the strength and endurance of their body muscles and provide relevant information on the efficiency of sport-specific training. Therefore, Good coordination and balance is vital to the sports person. The quicker the reactions, the more chance the individual has of having “the edge” over the opposition, or of improving his or her personal best. New and extended movements may be progressively attempted, practiced and perfected involving action through the use of the musculoskeletal systems and, as importantly, the voluntary nervous system to initiate those actions. In addition to this, with the growth of athletic participation there has been a commensurate increase of sports-related neurologic disorders. Prompt evaluation and treatment of the professional and recreational athlete enable an earlier return to competition. Peripheral nerve injuries in sports are caused by trauma, compression, and traction. Nerve conduction velocities best evaluate them and it confirms the diagnosis, identify neurologic disorders in athletes. There is a shortage of research findings in the field of the neurosciences of athletes of different sports in India. The present study explores the Motor Nerve Conduction Velocity

(MNCV) of selected nerves of the upper and lower extremities of athletes of different sports. The study may also reveal the relationship of selected anthropometric variables with MNCV of selected nerves of the upper extremity and lower extremity. The findings of the present study may give explanations how to improve athletic performance by optimizing the function of nervous system. In addition to this, the results of the present study may provide objective measures of motor nerve function and also help in predicting the prognosis of neuropathy

Assoc. Prof. Dr. Garry KUAN, PhD, DBA
Secretary-General, Asian Council of Exercise and Sports Science (ACESS)
Secretary-General, Asian-South Pacific Association of Sport Psychology (ASPASP)
Secretary, Malaysian Sport Psychology Association (MASPA)
Exercise and Sports Science Programme,
School of Health Sciences,
Universiti Sains Malaysia
Malaysia

Assoc. Prof. Dr. Garry Kuan is an Associate Professor at the Exercise and Sports Science Programme, School of Health Sciences, Universiti Sains Malaysia. He currently serves as the Secretary-General of the Asian Council of Exercise and Sports Science (ACESS), the Asian-South Pacific Association of Sport Psychology (ASPASP), the Malaysian Sport Psychology Association (MASPA), and the Scientific Committee of World Exercise Medicine. In 2019, Dr. Kuan was appointed as the Chair of the International Network of the Young Scientist Network – Academy of Science Malaysia (YSN-ASM) and as a sport psychology panelist for the National Coaching Academy of Malaysia. He has published over 300 scholarly manuscripts, including more than 120 in high-impact ISI journals, and has acted as an editor for numerous international journals. Previously, Dr. Kuan served as a Senate member at Brunel University, a Council member at Victoria University, and was a contracted sports psychologist with the Australian Institute of Sport and Team Great Britain. His research has received multiple international awards, including the 2024 Top Research Scientist Malaysia (TRSM), the 2023 National Sports Innovator Champion, the 2023 Best JCI Malaysia Sustainable Development Goal Award, the 2022 Malaysian Book of Records – Human Achievement, the 2021 International Society of Sport Psychology (ISSP) Developing Scholar Award, and the 2021 JCI Top Ten Outstanding Young Malaysian. He also received the 2020 IFPEFSSA International Eminent Educator Award, the A-CIPA Young Researcher Award at the 27th International Congress of Applied Psychology, the International Scholars Award at the ICSEMIS pre-Olympic conference, and the Atsushi Fujita Research Scholarship at the 6th ASPASP Conference. In his leadership role, Dr. Kuan received the Australian Leadership Award in 2013 and the Victoria Ambassador Award for Young Person of the Year. Outside of his professional commitments, he plays the first violin professionally and teaches various musical instruments to community members.

Strength in Mind: Enhancing Athletic Performance Through Applied Sports Psychology in Malaysia

Athletic performance is influenced by many factors, including physical, tactical, technical, and psychological components. Among these, psychological factors frequently serve as the tipping point that determines success or failure in competition. Research by Kuan (2022) demonstrated that mental ability can account for over fifty percent of an athlete's success in competitive settings. Mental toughness, a term often cited by athletes, coaches, and applied sports psychologists, emerges as a critical psychological trait correlated with performance outcomes in elite sports. This presentation

offers a comprehensive examination of mental toughness, exploring its fundamental concepts, theoretical frameworks, underlying mechanisms, and empirical research, alongside practical applications within the context of Malaysian sports. The discussion begins with an engaging overview that contextualizes the role of sport psychology in enhancing athletic performance. Coaches and practitioners will gain access to a theoretical model designed to guide interventions aimed at fostering mental toughness in athletes. The presentation is organised into four key sections: the importance of sport psychology in applied settings, contemporary research findings, the interplay between self-efficacy and other psychological variables on marginal gains, and applied sports psychology initiatives in Malaysia settings. The primary contribution of this presentation lies in the practical guidelines provided to assist athletes and coaches in implementing sport psychology strategies, ultimately enhancing performance outcomes. By bridging theory and practice, this work aims to cultivate a deeper understanding of applied sports psychology, empowering Malaysian athletes and coaches to achieve greater success in sports.

Prof. Dr. Li Jing Zhu
Past Chair, Related Scientific Section World Psychiatric Association (WPA)
Olympic Psyche Alliance Vienna (OPA)
Austria

Prof. Dr. Li Jing Zhu received training in China's first professional sports psychology program, benefiting from elite education at both Peking University and Beijing Sport University. She later advanced her research at the Olympic Centre of the University of Vienna and the Department of Psychiatry at the Medical University of Vienna. She has taught at Peking University, Hong Kong Baptist University, and the University of Vienna, and served as Chair of a key section of the World Psychiatric Association. Globally, 36 professional books have been published in this emerging discipline, 22 of which were authored by Prof. Zhu. Fourteen of her works are archived in the International Olympic Committee's Olympic World Library. In 2017, her pioneering work on "sports injuries as a trigger for mental illness in athletes" was officially recognized by the IOC. The following year, she chaired the IOC Consensus Meeting on Mental Health in Lausanne, which produced a landmark consensus statement published in the British Journal of Sports Medicine in 2019. Prof. Zhu also championed IOC Resolution 1907, leading 189 National Olympic Committees to establish mental health support systems. She contributed to the development of international standard ISO 20776, later adopted by FIFA and the NBA, and played a vital role in embedding athlete mental health into the Olympic Agenda 2020 and the WHO's ICD-11. In response, she founded the "Olympic Psychology Alliance" (OPA) to promote interdisciplinary, cross-cultural, and localized mental health support systems. As she emphasizes in the Olympic spirit: what will be remembered in the future is not the meetings held, but the lives saved.

Addressing the Challenge, Conflict of Mental Health Impact in Sport Post of IOC International Standards: The Solution in Malaysia

L. J., Zhu., J., Hell & V. Klissouras
World Psychiatric Association (WPA) / Olympic Psyche Alliance (OPA)

Malaysia has achieved remarkable Olympic success, particularly in badminton. Yet behind these athletic triumphs lies a vulnerable generation of young people and athletes exposed to the lasting mental health impacts of conflict — including trauma, stigma, and systemic neglect— as highlighted

by the International Olympic Committee (IOC) Consensus Statement on Mental Health in Elite Athletes. Key challenges in Malaysia and similar post-conflict settings include: 1) Professional Deserts: A severe shortage of interdisciplinary mental health professionals; 2) Cultural Barriers: Help-seeking obstacles rooted in strength-based national identities; 3) Data Gaps: The absence of local epidemiological research hinders targeted interventions; 4) Resource Imbalances. Mental health support remains overshadowed by medal-focused investment. For many years, OPA has actively contributed to and witnessed the development of the global athlete mental health system, from its early stages to its current progress. In light of the challenges above, we sincerely invite your National Olympic Committee to join us in launching a collaborative initiative to establish an interdisciplinary, cross-cultural, localized, and sustainable mental health support system for athletes. The next phase of global collaboration should focus on: Localized implementation of international standards; Interdisciplinary and cross-cultural training and certification systems; National-level policy development and strategic partnerships; Research, monitoring, and mechanisms for continuous improvement; and Innovative integration of traditional medicine and modern approaches. Just as we redefined the Olympic motto in Lausanne and established industry standards in Geneva, we now seek to join hands with your nation to pioneer a new chapter—where Freud's couch meets acupuncture bronze figures, and sports biomechanics dialogues with yoga philosophy. This vision honors local cultural contexts while avoiding academic Western-centricity. We call on National Olympic Committees and health stakeholders to support sustainable, culturally sensitive mental health systems—where future generations will remember not the meetings, but the lives saved.

Symposium 2

Prof. em. Marc CLOES (Chair)
Past-President, AIESEP
Department of Physical activity and Rehabilitation Sciences
University of Liege
Belgium

Prof. Dr em. Marc Cloes is an honorary professor. He pursued his career in the Department of Physical activity and Rehabilitation Sciences at the University of Liège (Belgium) where he led the training of teachers in physical education during almost 20 years. His scientific activity is in the field of sport pedagogy: analysis of the teaching process and educators' training in the contexts of physical education, physical activity, and sport. His research is based on the integrative model of the teaching-learning process advocating an ecological approach to the educational relationship (http://orbi.ulg.ac.be/ph-search?uid=U012570). In the school context, he defends an approach that strengthens the role of the physical education teachers as the corner stone of the promotion of an active and healthy lifestyle. He considers that physical education should be more focused on meaningful and integrated approach that will contribute to prepare concrete physically educated citizens. He advocates the implementation of an inclusive quality physical education linked to concepts like physical literacy, societal transfer, accountability as well as the application of the PAMIA principles. Active in several international associations, he chaired the AIESEP (International Association for Physical Education in Higher Education - www.aiesep.org) from 2014 to 2022.

Is It Easy to Define Physical Activity? Analysis of the Answers of Freshmen in Sports Sciences and Physiotherapy from the University of Liege, Belgium

When considering promotion of an active lifestyle, people representations play a key role. They can be envisaged through the DIRAP acronym (Definition, Impact, Representations, Assessment, Planning). According to that, analyzing definition of physical activity is central as it provides important information on the knowledge about that fundamental concept and valuable data to understand how to increase the number of citizens who respect the guidelines. We collected the definitions of 1,409 students from the University of Liege who started studies in sports sciences or physiotherapy between 2013-2014 and 2023-2024 academic years. After treatment, 87% of the whole sample proposed a real definition. Adding to them the answers coded as 'Information', 1324 records were gathered for analysis. Students gave a mean of 1 out of the 4 items identified in the OMS (2010) definition. Only 1.2% provided the expected four items. The most proposed referred to the body movement (48.8% of the students). When identifying the kind of physical activities, sport was mentioned by 89.3% of the 1.315 students who answered the question. Only 0.7% of them identified the five expected dimensions. Findings show that there is a lack of knowledge about physical activity in the young adults who just finished their secondary school and begin studies in which that concept is central. Examples of what could be implemented to fight against such a situation will be developed.

Dr. Louisa Mei Sin Tang
Education Consultant on Kindergarten and Primary School Education
Founding Principal, Baptist (Sha Tin Wai) Lui Ming Choi Primary School
Hong Kong-China

Dr. Louisa Mei Sin Tang is currently the Consultant of two primary schools in Hong Kong. She is the founder principal of the prestigious Baptist (Sha Tin Wai) Lui Ming Choi Primary School ("BSTWLMCPS") and has been devoting to the education of young children for over 50 years. After her retirement from the principalship of BSTWLMCPS, she continues to search for the fundamentals for cultivating whole-person development of the youngsters. She has been a pioneer in searching for the keys of foundation education and striving to promote the improvement of kindergarten and primary school education. Apart from her consistent studies in education, she also visited various places all over the world to study effective education modes and teaching methods to bring back for application and training up teachers in order to improve kindergarten and primary education in Hong Kong with eminent results. She has thus developed a set of curricula and innovative methods training up principals and teachers in kindergartens and primary schools to teach in an interesting and effective manner. She has been the School Development Consultant/Advisor to different schools, kindergartens in Mainland China as well as in Hong Kong. She has been invited from time to time to provide trainings to principals and cadet teachers in various areas in Mainland China including delivering talks and seminars to Shenzhen University and arranging interflow visits and education profession seminars in Hong Kong schools for mainland principals and teachers.

Enhancing Students' Wellbeing and Academic Performance --- "A Holistic Approach from a Principal and Leadership Perspective"

The main goal of a school is to cultivate students to have a whole person development. Students must be healthy and happy. To make the principal's visions to be the shared visions in the school may take years to get the 'Big Things' done. The success of the model school - BSTWLMCPS, may sum up as follows: 1) *Life-long learning* -- Dr. Tang continues her studies throughout her lifetime. She seeks advice from experts. The school is regarded as a model school because it has got the guidance from Dr. Chin Ming Kai, an expert in health and wellness discipline. Dr. Tang has attended all meetings in the discipline and followed the advice from Dr. Chin and other experts; 2) *Building a learning organization* **--** The staff of BSTWLMCPS are all keen learners. They are eager to get training by different professionals and experts to nurture students physically, mentally and academically; 3) *Shared visions* -- Every effort is made to share the visions of health and wellness to all the stakeholders of the school to use the best practices. It is utmost important to mobilize all towards the shared visions of health and wellness; 4) *Work as a 'TEAM'* – 'Together Everyone Achieves More'. A principal must be fair and just, and should understand the weaknesses and strengths of each staff member. Workload must be fair and clear so that everyone works in a team to get the utmost quality; 5) *Leadership is Influence* – Leadership is about one life influencing another. Enthusiastic leaders must be close enough to relate to others but far enough to be ahead to motivate them. The Whole School works together to achieve the missions and visions of the school.

Prof. Jianhui Dai
Executive Board Member, ACESS
Board of Directors, BRICSCESS
School Physical Education and Sports Science
Soochow University
China

Prof. Dr. Jianhui Dai is currently the Professor in the School of Physical Education and Sports Science at Soochow University in P.R. of China. She received her bachelor's degree from Anhui Normal University, her Master's Degree in Sport Studies from Zhejiang University and her PhD Degree in Sports Humanities and Social Science from Shanghai University of Sport. In 2007, she was a visiting socio-cultural studies and sport management scholar in the Department of Kinesiology, Recreation, and Sport Studies at the University of Tennessee-Knoxville in the United States. Throughout her career she has been engaged in teaching and research work in the fields of sports sociology and national fitness. Her research focuses on the organization of grassroot sport, sports instructors, and the relationship between government and public sports services. She has published more than 80 academic papers in domestic and foreign journals and has offered many undergraduate and postgraduate courses and has received high praise from students. She is the board member of the China Sport Science Society, an executive board member of Asian Council of Exercise and Sports Science (ACESS), Board of Directors of the BRICS Council of Exercise and Sport Science (BRICSCESS) and is Scientific Advisor for The Foundation for Global Community Health (GCH).

Physical Inactivity, Non-Communicable Diseases, and National Fitness Plan of China for Physical Activity

China has the world's largest population and is experiencing and its population is under-going a major change in health status due to industrialization, urbanization, and a sedentary lifestyle. It is estimated that approximately 82% of China's disease burden is due to the prevalence of non-communicable diseases (NCDs). Physical activity (active travel) is considered the best preventive measure against NCDs. The Chinese government has introduced several steps to improve national fitness and overcome NCDs among the aging population. Exercise and sports play a vital role in promoting physical activity and is helpful in accomplishing the national fitness level for Healthy China under the national fitness plan (NFP). A current study aims to explore the role of national fitness plan (NFP) in promoting physical activity and health and well-being in the prevention of NCDs under built environment intervention. The study was exploratory, and the mixed-method approach was used to analyze the primary and secondary data. A purposive sampling technique was used to collect the primary data from those individuals rich in knowledge about the National Fitness Plan (NFP) of China and its role in promoting physical activity for physical fitness. Results showed 32% of the participants believed that the national fitness plan helped promote sports, environment, and health. Twenty-eight, 28.0% reported that NFP helped promote cycling and walk environments for physical activity and health promotion and prevention of non-communicable diseases (NCDs). Participation in physical exercise and sports is the preferred approach to prevent a range of NCDs diseases. In the context of rising active living among the Chinese people, the facilities such as built environments and green parks, under the national fitness plan (NFP) for sports, play a crucial role in the mitigation of NCDs.

Assist. Prof. Dr. Rupalee JASROTIA (Co-Presenter)
Consultant Interpreter (Dogri-English) in the Parliament of India, Rajya Sabha.
Diploma in Indian Classical Dance-Kathak
Folk Dancer, Representative in J&K
Department of Higher Education,
Government Degree College
UT of Jammu and Kashmir (J&K)
India

Assist Prof. Dr. Dr. Rupalee Jasrotia is an Assistant Professor of English in the Department of Higher Education, Jammu and Kashmir (Union Territory of India). She has been working in Government Degree College, Mahanpur since December 2021. She is working as Program Officer NSS at GDC Mahanpur. She has completed her Master of Arts (M.A.) in English in 2014, Master of Philosophy (M.Phil) in 2017 and Doctor of Philosophy (PhD) in 2024 from the Department of English, University of Jammu, J&K UT. Her specializes in African-American Drama. She has qualified NET (National Eligibility Test) and State Eligibility Test (SET) in English. Moreover, she has presented as well as published many Research Papers in various National and International Seminars and Conferences. Besides this, she has also completed Certificate in Functional English from Indira Gandhi National Open University (IGNOU). She has also worked as Consultant Interpreter (Dogri-English) in the Parliament of India, Rajya Sabha. Apart from this, she is NCC 'C' Certificate holder with 'A' Grade. Not only she has earned the Diploma in Indian Classical Dance, Kathak but has also represented her State's (J&K) Folk dance in different parts of the country. Her objective is to provide the best services with the best of her knowledge, efforts, hard work and expertise.

Health and Well Being of School Children in Jammu and Kashmir- A Holistic Approach

A holistic approach to health and wellness education is one that considers not just the academic excellence but also the physical and mental health of the child. All the three aspects are interconnected and, therefore, the ignorance of any one of these will hinder the overall wellbeing of a child. To ensure the holistic approach to health education, the classes of Dance, Music, Yoga, Meditation, Sports have been integrated into the curriculum of D.A.V. Collegiate School. The inclusion of Dance and Music provide a safer space and outlet for the emotional expression, physical development, cognitive development, mental alertness and creativity of the school children. Yoga and Meditation, works as an essential part of the school curriculum and also enriches the overall personality development of the child. Moreover, the Sports activities not only enhance the physical fitness but also foster proper growth and development of the growing children. The purpose of this project is to study the positive impact of Dance, Music, Yoga, Meditation and Sports and it deals with the novel alternatives for assessment of muscular strength and stamina in the children. This envisages the need of time enhancement as well as rotation of such activities in a day for the holistic development of school going children belonging to different age groups of D.A.V. Collegiate School, Lachhipur, Kathua, UT of Jammu and Kashmir.

Assoc. Prof. Dr. Branislav Antala
FIEP World Vice-President
Faculty of Physical education and Sports
Comenius University in Bratislava
Slovakia

Assoc. Prof. Dr. Branislav Antala is presently working in position of Assoc. Prof. in Comenius University in Bratislava, Slovakia. He is also Meritorious professor in University of Zagreb, Croatia and Doctor Honoris Causa in Georgian State Teaching University of Physical Education and Sport in Tbilisi, Georgia. His area of specialization is Sport and PE Pedagogy and Sport management. He is a Member of the Editorial Boards of 12 international journals egg. Kinesiology (Croatia), FIEP Bulletin (Brazil), Montenegrin Journal of Sport Sciences and Medicine (Montenegro) or PE and Sport through the Centuries (Serbia). In Slovakia he was many years chair of State Commission for PE on National Institute for Education and Youth and member of Curriculum Council of Ministry of Education of Slovak Republic. He is chair of department in Faculty of PE and Sports, Comenius University in Bratislava, Slovakia. He is World International Vice-president of International Federation of Physical and Sport Education (FIEPS), FIEPS Europe Advisor, past member of Executive board of International Council of Sport Science and Physical Education (ICSSPE), past chair of International Committee of Sport Pedagogy (ICSP). He is coordinator of national & international research projects including ERASMUS + projects. He is a recipient of many international awards for contribution on development of PE in the world.

Tandem Teaching – an Innovative Collaborative Practice for a Higher Quality Physical Education in Slovak Primary Schools

Tandem teaching is a form of management of the teaching process in which the process is conducted simultaneously by two educators, and which is implemented mainly in the first years of primary school. In physical education, it can be the general class teacher in cooperation with PE teacher, coach or teacher´s assistant. Both educators are actively involved in teaching and have clearly divided competences. Examples of tandem teaching in Slovakia are projects “Modules” and "Coaches in School", programs implemented in Slovak primary schools in the 1st, 2nd and 3rd grades from the 2020/2021 school year. The programs, made up of varied movement activities from various sports, creates a relationship with movement activity and the student acquires basic movement competencies. Basic rules for implementation of programs are emotional atonement, all children in motion, safe play environment, children’s independent decision-making, motor versatility, optimal nutrition, implicit learning, teacher's engagement, supporting children's efforts and no recruitment in physical education classes. **I**n the 2022/2023 school year 192 schools, 950 classes, 22 000 children, and 150 trained coaches are involved for example in the program “Coaches in School”. Results from the pilot studies show that in the end of pilot evaluation increased number of children who choose PE into three most popular school subjects and increased also number of children who enjoyed PE. Almost 80% of the general class teachers rated the project as excellent, 82% of them rated the teaching content highly attractive for children, and 81% of the class teachers would welcome its continuation in the future. The study is supported by VEGA Agency of the Ministry of Education, Research, Development and Youth of the SR with number 1/0127/23.

Assist. Prof. Dr. Yan Wang
Affiliated Research Scholar, China Education Innovation Institute
Beijing Normal University
Faculty of Education
Shenzhen University
China

Assist. Prof. Dr. Yan Wang is an Assistant Professor at the Faculty of Education, Shenzhen University, China. She is also an affiliated research scholar at the China Education Innovation Institute, Beijing Normal University. She received her bachelor's degree in Biology before transitioning to Comparative Education at Beijing Normal University. She later earned her PhD in Education from the University of Helsinki, Finland, in 2019. Her research focused on a comparative study of primary education in Finland and China. After graduation, she worked as a lecturer at the Langping Research Centre for three years, where her research and teaching centred on dual-career development for high-level talented Chinese athletes at universities. Her research interests include holistic education, sports and health education, science education, and cross-cultural studies. She has published peer-reviewed scientific papers in international journals and books on comparative studies in education, along with other articles and textbooks on education in both English and Chinese. She serves as a reviewer for international and national journals and conferences, including the *International Journal of Science and Mathematics Education*, AERA, and NARST. Her current research project focuses on a comparative study of physical and health education inside and outside schools in Finland and China. She also works on integrating science education with sports and health education through curriculum design and extracurricular activities with the aim of whole person development.

Towards a Holistic Health and Well-being: A Comparative Analysis of Policies and Teachers' Understanding of Physical and Health Education in Finland and China

Both Finnish and Chinese students have performed well in international academic assessments. However, Finnish students invest significantly fewer hours in school than Chinese students. Policymakers and national curricula in both countries place high importance on physical and health education at school levels and underline the importance of students' well-being. However, physical and health education is considered and practiced differently in the two countries. Teachers are the main actors in implementing the reforms. This paper investigates the national policies and understanding of physical and health education, as well as well-being, in Finland and China from the perspectives of teachers. The research found that the discourse surrounding physical and health education and well-being is similar at the national policy level in both countries. Teachers in both countries emphasize the importance of physical and health education. However, the narrative and explanations of the importance and implementation of physical and health education differ between the two countries. Chinese teachers focus on physical and health education per se, which indicates a subject matter-based understanding. In contrast, physical and health education in Finland is viewed as a means to an end-whole-person development.

Symposium 3

Prof. Dr. Myriam GUERRA-BALIC, MD, PhD (Chair)
Board of Directors, GCH
Head, Department of Sport Sciences and Sport Management
FPCEE-Blanquerna
University Ramon Llull
Spain

Prof. Dr. Myriam Guerra-Balic, MD, Ph.D. is an emeritus professor in the Faculty of Psychology, Education and Sport Sciences–Blanquerna (FPCEE-Blanquerna), University Ramon Llull (URL). She is a MD specialized in Sport Medicine, with a PhD developed on Exercise Physiology and Down Syndrome. She is the Head of the Department on Sport Sciences and Sport Management. She was the Vice-Dean of International Relations at the FPCEE-Blanquerna coordinating national and international exchange programs, cooperation programs and research mobility for students and professors. She has also been a member of the International Relations Committee of the ACSM. She has received the "ACSM Student Award" (2000), the "ACSM Dr. Lisa Stroud Krivickas Clinician Scholar Award" (2015) and with her team they were recognized with the "2022-UNESCO ICM Martial Arts Education Prize". She has taught as an international visitor professor in several countries around the world. She has been developing her career as a professor and researcher for more than 30 years in the field of Health, Adapted Physical Activity and Adapted Sport, especially focused on children, adults and elderly with an Intellectual and Developmental Disability. She collaborates with the Health Agency of the Barcelona's City Council, with the Fundación Iberoamericana Down21, and she is also involved in the HYPOXSPORT network. At present she is a member of the Board of Directors of the Foundation for Global Community Health (GCH).

Physical Activity and Exercise in Elderly with an Intellectual and Developmental Disability: A Spanish Perspective

The current situation in Spain shows that more than 60% of the people with an Intellectual and Developmental Disability (IDD) will be older than 45 years in half a decade's time. Studies related to people with IDD have shown that there is a range of prevalence (0.05 to 1.55 %) due to changes in diagnostic practices, population characteristics, and exposure to known risk factors, and in Down syndrome the prevalence in Spain (1/600-800) remains stable because the incidence has decreased. On other side, life expectancy for persons with mild IDD is similar to the general population, while people with moderate or severe IDD can live into their late 60s and 50s, respectively. A recent study (Garcia-Dominguez et al, 2020) assessed the health status of 1040 elderly with IDD (>44 years), and compared it with 12,172 elderly living in Spain, and found that obesity is one of the most prevalent chronic diseases among individuals with IDD (their probability of presenting obesity was higher than in the general population: 25.3% vs. 20.3%). Moreover, it has also been shown that people with IDD present an early decline, both in cognitive (Janicki et al, 2017) and fitness conditions (Oviedo et al, 2014). That is why physical activity in this population is one of the main components for health and wellbeing, as exercise has not only physical effects, but also effects on brain plasticity, improving cognitive and emotional aspects. In this presentation, the aging process of elderly with an IDD focused on Spanish studies will be presented, different activities will be proposed which would improve their functionality and fitness levels, decrease their sedentary behavior, and produce cognitive and social benefits.

Prof. Dr. H. Serap INAL
Dean, Department of Physiotherapy and Rehabilitation
Faculty of Health Sciences
Istanbul Galata University
Istanbul, Turkey

Prof. Dr. H. Serap Inal is the chair in the Department of Physiotherapy and Rehabilitation, Faculty of Health Sciences in Istanbul Galata University. She worked in the Department of Physiotherapy and Rehabilitation and Orthotics and Prosthetics Centre in Hacettepe University as Research Assistant, Ankara, Turkey; and as Assistant Professor in The College of Applied Medical Sciences, King Saud University and as Consultant in Orthotics Section, Physiotherapy Department in King Khalid University Hospital, Riyadh, Saudi Arabia. While she was the academic chair in Marmara University, The School of Physical Education and Sports, initiated The Adapted Physical Activity (APA) Certificate Program with her colleagues in 2002, which can be considered as the pioneer in this area in Turkey. She headed the Istanbul University, School of Physical Education and Sports between 2006-2009, and The APA Certificate Program was also structured during her time in this university. She has books (Turkish) in the areas of exercise and sports biomechanics, upper extremity prosthesis, orthotics in neuromuscular disorders, and chapters (English) in geriatric rehabilitation, adapted physical activity, supported employment for people with ID. She is also working on the dissemination of dance among people who have severe disabilities. She was a part of the European University Diploma in Adapted Physical Activity-EUDAPA, Finland between 2010-2016; and is a member of ICHPER-SD (life member), IFAPA, Turkish Neuromuscular Disorders Society and Turkish Physical Therapy Association, The Foundation for Global Community Health-GCH. She is an ACRE certified supported Employment specialist from Virginia Commonwealth University since 2018.

Pelvic Floor Dysfunction in Women Athletes and Increase Awareness on Preventive Measures

Considering the differences between the male and female pelvis, it is obvious that women are more disadvantageous against the forces falling on pelvis during strenuous sports activities and even during recreational physical activities that may result with pelvic floor dysfunction (PFD). Since heavy lifting and running, jumping or landing increase the forces falling on the body 3-16 times more of the body weight of the athletes they require stronger and much more resilient pelvic floor muscles than the general population for preventive measures and avoid undesirable moments as urinary or anal leaking or incontinence during the competitions. Besides strenuous sports activities, the sedentary lifestyle with prolong standing, sitting or lying positions, using high heeled shoes may also result with PFD. The acute injuries, chronic diseases, asymmetric postures may be the other risks of PFD. However, due to the weaker muscle power, increased mobility, the anthropometric and hormonal differences (menarche and pregnancy) women are more prone to have PFD. As the development of the pelvis in both genders completes at the age of 24-25 years, it is necessary to raise awareness about preventive measures on PFD starting from childhood and adolescence ages among athletes, trainers, families as well as general population. Thus, for a healthy pelvis in adulthood and old age as an athlete or an individual in the mainstream of society, it is important to maintain the strength and flexibility of the musculoskeletal system and good posture. Therefore, for preventive physiotherapy measures, the core and pelvic floor exercises should specifically be included in the exercise plannings of female athletes as well as the white- and blue-collar working population who are either sitting or standing during the day.

Prof. Dr. Lucetta Chiung-Tzu TSAI
Executive Board Member, World Leisure Organization
Honorary President, Chinese Taipei Waterski and Wakeboard Federation
President, Taiwan Leisure Association
Leisure & Sport Management Department
Business School
National Taipei University
Taiwan I

Prof. Dr. Lucetta Chiung-Tzu Tsai is a professor of Leisure & Sport Management in the Business School Department of National Taipei University in Taiwan. Dr. Tsai is also honorary president of the Chinese Taipei Waterski and Wakeboard Federation and the Taiwan Leisure Association. Moreover, she has been serving as a member and an executive member of the board of directors for the World Leisure Organization from 2012-2017 and 2020-2025, and a Commissioner in the Gender Equality Committee and the Ocean Affairs of the Executive Yuan from 2014-2016 and 2018 to 2020. Dr. Tsai has granted the “Academic Research Award” in 2009, 2010, 2012, 2013, 2019, 2020, 2021 and 2023 in Taiwan. To date, she serves on several SSCI, SCI, SCIE, SCOPUS, TSSCI journal reviewers. She is editor-in-chief of International Leisure Review, Social Sciences (SSCI) and Associate Editor of Leisure Sciences (SSCI). Dr. Tsai has written on the topic of women in leisure and sport. Her research has appeared in 60 International Journals and books, including SSCI, SCOPUS, ABI, EconLit listed. She is involved in developing and implementing programs related to leisure provisions, physical activity and health promotion. In the past twenty years, she has received 60 national grants, up to USD 600,000 to examine leisure and health issues among women.

Social Inclusion: Accessible Tourism for Disabled in Taiwan

In 2006, delegates from 160 countries signed the United Nations (2006) Convention on the Rights of Persons with Disabilities and declared to support a list of rights for tourists with disability including their accessibility to tourism experiences, goods and services. According to the world statistics, 15% of the global population are disabled (WHO, 2015). The proposed project is based primarily on an academic research to understand the experiences of disabled in two selected territories, Taiwan and Hong Kong. Hong Kong is the primary study area, whereas the study in Taiwan serves as a parallel study for comparison. The planned research will use the cases of selected public parks. The specific research objectives are six-fold: 1)To understand the organization planning to do in terms of destination and attraction planning and management for disabled; 2) To examine the site has done or planned to do in terms of physical, sensory design and staff training for disabled; 3) To identify the site has done or planned in terms of visitor knowledge or information, emotional attachment or feeling for disabled; 4) To study what has the site done or planned to do in terms of visitor short-term and long-term satisfaction, and behavioral expectation for disabled. 5) To understand the site has done or planned to do in terms of long-term memory and loyalty for disabled; 6) To examine the site has done or planned to do in terms of other products and services for disabled.

Assist. Pro. Dr. Luis CALMEIRO, PhD
Board of Directors ACPES
National Institute of Education
PhD and MSc by Research Program Director
Nanyang Technological University
Singapore

Asst. Prof. Dr Luis Calmeiro is at the National Institute of Education, Nanyang Technological University, Singapore. He has a specialization in Sport Psychology with a MSc from the Faculty of Human Movement, Lisbon, Portugal, and PhD from the Florida State University, USA. He is the director of the MSc by research and PhD programs of the department of Physical Education and Sports Science (PESS). He currently serves on the board of directors of the Asean Council of Physical Education and Sport (ACPES). He has received the Association for Applied Sport Psychology 2007 Dissertation Award for his work on the dynamic nature of the emotion-cognition relationship during performance. He has 30 years of experience of teaching in higher education in Portugal, UK and Singapore in areas of sport and exercise psychology and sport pedagogy. His research interests include cognitive and emotional aspects in sport, performance under pressure, psychosocial health in young people, and positive development and personal growth.

Mental Health Literacy in Coaching: Protecting the Wellbeing of Coaches and Athletes

Mental health literacy (MHL) among coaches represents a critical yet underdeveloped area within sport psychology and coach education. Although research increasingly recognizes the importance of athlete mental health, comparatively little attention has been given to the psychological wellbeing and literacy of coaches themselves. Coaches experience substantial occupational stress, emotional labor, and performance pressure, all of which can compromise personal wellbeing and professional functioning. Developing MHL equips coaches to identify symptoms of distress in themselves and others, to challenge stigma surrounding mental illness, and to act appropriately as psychological first aiders within their sporting environments. Grounded in Jorm's (2000) conceptualization of MHL and informed by Côté and Gilbert's (2009) model of coaching effectiveness, this perspective positions the coach as a pedagogical and relational agent whose practice extends beyond technical instruction to encompass the holistic development of young athletes. MHL enhances the intrapersonal and interpersonal dimensions of coaching effectiveness by fostering reflective self-awareness, empathy, and the capacity to build psychologically safe environments. Coaches who understand and manage their own mental health are better positioned to sustain effective relationships, support athlete wellbeing, and model adaptive coping behaviors that normalize help-seeking within sport. Integrating MHL into coach education and professional development reinforces sport as a context for personal and moral growth rather than one defined solely by performance outcomes. Conceptualizing coaching as a relational and well-being-oriented practice highlights the reciprocal nature of mental health in sport: protecting coaches is integral to protecting athletes. Strengthening coaches' mental health literacy thus constitutes a foundational step toward cultivating psychologically safe, ethically responsible, and developmentally enriching sporting environments for young people.

Symposium 4

Prof. Emeritus Ian Culpan (Chair)
Board of Directors, The Foundation for Global Community Health (GCH)
International Advisor, Asian Council of Exercise and Sport Science (ACESS)
Co-Director of the New Zealand Centre for Olympic Studies
University of Canterbury
New Zealand

Emeritus Prof. Ian Culpan is the Co-Director of the NZ Centre for Olympic Studies and the former head of the School of Sport and Physical Education at the University of Canterbury. He has been a visiting professor at Charles University Czech Republic, the German Sport University of Cologne Germany, the University of Peloponnese Greece, the International Olympic Academy Olympia Greece, and Kristianstad University Sweden. His research interests and publication experience are in physical education/teacher education, Curriculum Development, PE Pedagogy, Olympism, the social and educative value of PE and sport, and holistic wellbeing. He has directed many national initiatives in PE, qualifications development, and Olympic matters. Professor Culpan has been the vice-president of Physical Education NZ (PENZ). He has been the national Journal Editor and on the editorial board of 5 international journals. He has been the president of NZ Olympic Academy and the President (Oceania) for the Federation Internationale d'Education Physique (FIEP). He an executive board member for the Global Foundation for Community Health, and an International Senior Advisor Asian Council of Exercise and Sport Science. Professor Culpan has twice been awarded the International Olympic Committee Trophy for his teaching and research in Education and Sport. (2000 & 2013). He was the 7th person to be awarded the Sir Alexander Gillies Medal for PE in NZ (2001) and is a Life Member and National Fellow of PENZ. He co-coordinated the NZ All Blacks Leadership Training Programme and has been an education consultant for several multi-national corporations and served on UNESCO's 2013 expert advisory group for developing Policy on Quality Physical Education

Olympism Education: The Educative, Social and Ethical Value of Sport for Holistic Wellbeing.

The Olympic Games (OG) is fraught with problems e.g. excessive nationalism, wide-spread doping, diverse gender identities, extensive match fixing, unchecked sport technology, rampant corruption, and the political economy of sport. These problems are pervading international sport and are not peculiar to the OG. However, there is hope. The American President Johnson claimed in the 1960s *"At the desk where I sit, I have learned one great truth. The answer for all our national problems – the answer for all the problems of the world – come to a single word. That word is "education."* Education gives hope in overcoming these Olympic problems. The challenge to the Olympic Movement (OM) is to put emphasis on, and provide leadership in, Education. Presently, across the globe there are countless programmes claiming to promote Olympic Education. Many scholars have pointed out almost all these programmes are focussed on Olympic indoctrination – that is the OM promotes the unproblematic good of itself, and the Games. This presentation will critically advocate for an education focussed on a dynamic philosophy that some scholars argue is the most advanced political, educative, social and ethical explanation of sport that has emerged in the last 100 years. This philosophy is called Olympism, and it will be argued that it should be an important function of any physical education (PE) curriculum. The Olympism Education discussed in this presentation is important to the future legitimacy of PE and is an integral component of the New Zealand's PE curriculum. This presentation highlights a working definition of Olympism, emphasises how it's educative, social and ethical value, aligns with UNESCO's *International Charter of Physical Education*

and Sport, UNESCO's Sustainable Development Goals (3&4), the Global Forum for Community Health's conception of holistic wellbeing and the New Zealand Curriculum.

Geraldine Bernardo
Treasurer, Asian Council of Exercise and Sport Science
Board Member, Asian Association for Sport Management
President, Sport Management
Council of the Philippines Inc.
Athletic Director, De La Salle University
Philippines

Geraldine "Dina" Go Bernardo is a graduate of B.S. Physical Therapy from the University of the Philippines and holds a master's degree in business management at the Asian Institute of Management (AIM). Her foray into sports began when she trained as a National Athlete and became the Team Captain of the Philippine Women's Dragon Boat Team. Dina became the Chairperson of the Philippine Olympic Committee Athletes Commission, representing the rights and interest of the athletes. She was also appointed as the first female Executive Director of the Philippine Sports Commission (PSC), handling the administrative functions and operation of the country's sport governing body. She is a recipient of various international training from the IOC, M.I.T. and Babson College, and was the first Filipina accepted into the inaugural class of the Global Sports Mentoring Program for emerging women sports leaders under the U.S. State Department and espnW. These experiences have led her to champion grassroots sports and women empowerment in several communities, through programs such as SWEEP, short for Sports for Women's Empowerment and Employment Program, and RePLAY, ReLIVE and ReCreate - building Community Resilience Through Sports for Post-Disaster areas. She teaches Sport Management, Sport Marketing and Strategic Management at the De La Salle University (DLSU) and pursuing further studies in Doctor of Business Administration (DBA) with research focus on athlete and sport entrepreneurship. She recently assumed the position of athletic director of the university's varsity program.

"Athletepreneurs": Exploring the Determinants of Entrepreneurial Intentions among Student-Athletes in a Private University in Philippines

The sport industry is one of the fastest growing sectors averaging at least 4% per annum. With the increasing interest in sport-based entrepreneurship, the study aims to explore the determinants of entrepreneurship intention, in particular, among student-athletes, while also investigating whether sport intrinsic and academic related factors can influence their behavior towards entrepreneurship. The study was conducted via non probabilistic sampling of 116 student-athletes from a private university. The survey consisted of seven constructs for entrepreneurial intention based on the Ajzen's Theory of Planned Behavior. Findings show that the student-athletes with high proactive personality have a more positive attitude towards entrepreneurship and are inclined to participate in entrepreneurship education. Subjective norm or perceived support from family and friends and perceived behavior control or self-efficacy are the strongest influencers towards entrepreneurial intention. Among the sport intrinsic factors, it appears that student-athletes playing in individual sports are more inclined towards entrepreneurship than those in team sports. However, lowest mean scores were also noted for entrepreneurial intention and risk taking propensity. These may be attributed to cultural context and the lack of exposure to entrepreneurship education in their university. There is clearly a need to pursue entrepreneurial intentions research in the realm of student-athletes and athletes as a whole, especially since career prospects after sport are not readily available nor apparent, especially when they are still actively competing. The insights gained in the study should also cause universities to rethink educational policies to include student-athletes into mainstream entrepreneurship education – to help leverage their innate traits as sports athletes towards business.

Dr. Gurdeep SINGH, Ph. D. & D. Litt
Member, Indian Delegations for Olympic Games and World University Games.
Member, Mission Olympic Gold and Special Invitee in Olympic Task Force for Developing a Strategic Action Plan and Promoting Sports.
Former Secretary, Sports Board, Association of Indian Universities
President, Indian Academy of Sports Science and Physical Education
India

Dr. Gurdeep Singh handled the charge of a top sports administrator in National University Games and enjoyed the privilege of leading serious pursuit of excellence for promoting health, fitness, performance and well-being of the youth. He also attained global exposure, by representing Indian contingents as elite athlete, official delegate and sports specialist in (Three) Olympic Games and (Two) Hockey World Cup Tournaments. He provided professional leadership to Indian contingents in (Six) World University Games, as the Head of Delegation. He was member of Core Group for preparing roadmap of National Sports Policy and designing Sports Commission for Operation Gold. He was special invitee for Olympic Task Force, to design action plan for preparing Indian contingents for (Three) Olympic Games. He worked at Sports Authority of India, New Delhi and National Institute of Sports, Patiala, for providing coaching and training, for pre-competitive exposure to national hockey teams before participation in global build-up competitions. He has also qualified (Two) specialized courses in Sports Administration and Olympic Solidarity Course in advance training of youth hockey, duly certified by International Olympic Committee. He was member in 'panel of experts' to formulate schedule of Khelo India Games. Presently, he is President, Indian Academy of Sports Science and Physical Education. He is also life member, Sports Psychology Association of India, Indian Academy of Health Psychology and National Association of Physical Education and Sports science for updating his professional knowledge and technical skills.

Impact of Role Models on Holistic Youth Development from Indian Perspective

In modern university education, games and sports play an important role in the development of integrated personality of the youth-health, fitness, performance and well-being. Accordingly, Sports Board, AIU organized National University Games in 206 sporting events on national and zonal basis (National Level=86 Events and Zonal Level=120 Events) annually, to promote culture of active and healthy lifestyle. Elite athlete role models were involved in impartial conduct of National University Games, as observers, selectors and specialists, by applying a pyramidal approach. A total of 5,80,665 student athletes participated in National University Games-2018. Based on performance, 1000 healthy and talented sportspersons were selected, for long term development plan executed, under my close supervision as role model, for participation of Indian contingent in World University Games-2023 that won 26 medals (Gold-11, Silver-5 and Bronze-10). University sporting system proved as the main platform to showcase health, fitness, skill and talent of the youth, for throwing- up significant portion of potential in national stream. Indian contingent participated in Olympic Games-2021 that won total 07 medals (Gold-01, Silver-02 and Bronze-04) out of which 03 medals belonged to university athletes, along with 07 top-class hockey players of bronze medal winning Indian team were from university sector. Indian delegation participated in Olympic Games-2024 and won 06 medals (Silver-01 and Bronze-05) out which 02 medals were secured by university athletes, along with 07 potential hockey players of bronze medal winning Indian team were from university system. India won Asian Hockey Champion Trophy-2024, out of which 08 prominent hockey players represented university pipeline. Global exposure of elite athlete role models enabled

university sportspersons to handle pressure to perform in a competitive environment. In this presentation, the issue of holistic health of youth will be discussed for active interaction to develop India as a sporting nation.

Thomas ROOT
Co-Founder, The Foundation for Global Community Health (GCH)
Advisor, UNGSII
Advisor, The Global Mental Wellness Foundation
CEO, HOPSports
USA

Thomas Root was one of the first specialized fitness trainers in the US for children. In 1988 Tom designed and built one of the first functional training centers specifically designed for young athletes and child actors. He spent the last 30 years building a global network of schools and various organizations as well as community and corporate well-being initiatives including NFL Play60, the Arthur M. Blank Family Foundation, Cleveland Cavaliers, Chicago Bulls, Milwaukee Brewers, the Harlem Globetrotters, Cartoon Network, United Way, AAHPERD, US Rowing, USA Volleyball, WNBA, Blue Cross Blue Shield, the American College of Sports Medicine, American Heart Association, Sodexo, the US Army, the US Navy, the Children's Hospital of Atlanta and many others. He has advocated a multi-disciplinary approach to physical activity, health, and a variety of children's wellness initiatives on multiple occasions to senior American leadership. In 2018, Tom was invited to the World Economic Forum as an advisor for the UNGSII SDG Lab incubator developing strategies around the important role Physical Education and Sport play in the future for Smart Cities. Additionally, Tom has been a keynote speaker at numerous international conferences across the US, Europe and Asia. Tom is a former advisor to the AAHPERD Corporate Council, Recipient of the Hero of the Year Award, and now sits on the UNGSII advisory board, the global Mental Wellness Foundation, and the Foundation for Global Community Health.

How do Corporations, Governments, and Universities Work Together in Funding Well-Being Programs in Schools that Improve Mental Well-Being?

Many schools in the US are suffering from a lack of funding in areas of Physical Education and the Arts and as such, we must be creative with fund-raising. The aim of this presentation is to elucidate the challenges schools experience when seeking resources for school Physical Education programs. This presentation will demonstrate collaborations with the Department of Education, Department of Health, Professional Organizations, and Corporations in the United States. The presentation will present solutions learned over the years to connect organizations with the necessary resources regarding successful implementation of peer-reviewed well-being programs incorporating all community stakeholders that utilize innovative digital media and gaming. Highlighted will be projects such as the NBA's Chicago Bulls, the Arthur M. Blank Family Foundation, in conjunction with the NFL Atlanta Falcons, partnering with corporate grant funds from Verizon, Coca Cola, the Anne E. Casey Foundation, Philips, the Kellogg Foundation, Healthy Youth Partnership, 24 Hour Fitness, Promise Neighbourhoods, the Prodigal Son Foundation, Capacity Builders, Super Value, PTA, and The United Dairy Association. By combining resources, we can redefine the importance of global citizens at a time when novel solutions for the youth community and heroic students are dearly needed. This

presentation will advocate the importance joining forces are in the name of realizing a positive future for our students and our beautiful planet.

Dr. Suresh Letchmanan
Managing Director Asia Pacific,
Borussia Dortmund (BVB) Asia Pacific Pte Ltd

Dr. Suresh Letchmanan is a Singapore national who specializes in strategic planning and advisory, business development, legal counselling and general management across many areas. He is currently the Managing Director of APAC for Borussia Dortmund. Suresh has over 20 years of combine experience in the sports and legal industry with key responsibilities ranging from general management, commercialization, contract-negotiations, event management, athlete endorsement, talent acquisition, sports education and supervision of public relations sports projects in Asia (including Oceania), Middle East and Africa across a wide portfolio of properties. As a sports lawyer, Suresh is also heavily involved in negotiating commercial contracts. He was Vice President and headed the legal and business affairs of Dentsu Sports Asia and was also legal counsel at World Sport Group and thereafter worked in the Sports Law Practice at Rajah & Tann LLP.
Suresh graduated with honors in Law and Sports at Buckingham, England and continued to pursue his Masters of Laws degree in International Sports Law at Anglia Ruskin University, England. He recently achieved his Doctorate in Business Administration with the University College of North Borneo Malaysia, through UBA, Malaysia. Rounding off his experience, Suresh served in the Republic of Singapore Air force as a senior Sergeant for 6 years. He had a long history of football success from his school days at St. Stephen's Primary School to St. Patrick's Sec School and then the military team before a short stint as a semi-professional footballer during the mid 90's. He had achieved his football coaching qualification certificate with the Football Association of England in 2004 and most recently in 2022 with the German FA as well as a UEFA Youth certification. He held an honorary position in the Singapore Professional Football League with Etoile Football Club (first ever European team to play in an Asia Football League) as Director of Football and Team Manager in 2009.

Borussia Dortmund as a Model for Active Pathways and Collaborative Practices in Sport: Linking Elite Football to Sustainable Development and Holistic Wellbeing

Borussia Dortmund (BVB) is one of worlds and Germany’s most successful football clubs, combining elite sporting achievement with community-oriented initiatives. Founded in 1909, BVB competes in the Bundesliga and is celebrated for its strong fan culture, symbolised by the “Yellow Wall” at Signal Iduna Park. The club’s operational model integrates active and innovative pathways in talent development, community engagement, and health promotion. Central to BVB’s strategy is a world-class youth academy that fosters holistic athlete development through technical training, sports science, and life skills education. It blends technical training with evidence-based sports science, nutrition, psychology, and education to promote not only performance but also long-term physical and mental wellbeing. This multidisciplinary system relies on collaborative practices between coaches, physiologists, medical teams, data analysts, and educators to optimise athlete health. The same infrastructure is extended to community outreach programmes, encouraging grassroots participation in physical activity, health education, and social integration. This pathway not only

prepares athletes for professional football but also promotes lifelong health and wellbeing, echoing the principles of collaborative practice between coaches, medical teams, sport scientists, and educators. BVB's approach contributes directly to the United Nations Sustainable Development Goals (SDGs), particularly SDG 3 – Good Health and Well-being by encouraging physical activity and healthy lifestyles, and SDG 17 – Partnerships for the Goals through collaborations with schools, local governments, and international organisations to deliver grassroots football programmes. Beyond performance outcomes, BVB's initiatives emphasise inclusion, mental health awareness, and community cohesion, making this sport a vehicle for sustainable societal impact. This model demonstrates how a professional football club can transcend competitive success to become a catalyst for holistic health, wellbeing, and global sustainable development.

Prof. G L Khanna
Co-Founder, BRICSCESS
Former President, ACESS
Pro Vice Chancellor
Manav Rachna International Institute of Research and Studies
India

Prof. Dr. Gulshan Lal Khanna is Pro-Vice-Chancellor at MRIIRS, Delhi-NCR. Previously he worked SGT University, Gurugram as a Vice-Chancellor (In-charge). He is Visiting Professor (Sports Sciences) of Tsukuba University, Japan since 2012 and he was also a visiting Prof of University of Pedidikan Sultan Idris, Malaysia. Graduated with Honors from Presidency College Kolkata and completed his Doctorate from Punjabi University Patiala.He is the member of Prime Minister Olympic Task force 2020, 2024 and 2028. He was past President of Asian Council of Exercise & Sports Science. Presently he is vice president of BRICS Council of Exercise and Sports Sciences. He has received many Laurels, Oration Awards such as S.R Maitra Oration Award, B.B Sarkar Memorial Oration Award and Dr B R Ambedkar National Award. He was given an appreciation award by National Association of Physical Education and Sports Sciences. He has worked with many Indian Sports persons as Physiologist for Asian Games/Commonwealth/Olympics. He was a member of sports policy action plan of Govt. of India. He has produced 10 Ph.D.'s and presented and delivered Keynote address and published papers in National and International Conferences and published more than 120 research papers in National and International Journals. He has published and edited 10 Books. His area of Research interest is High Performance Physiology, Hydration, Nutritional Supplements and Performance analysis and Health Promotions.

India's Bid for the 2036 Olympics: Aligning with Olympic Ideals and Global Ambitions

India's aims to host the 2036 Olympics to bring about a peaceful and better world through sports, education, understanding and friendship. For India, organizing the Olympics Games would not only be a showcase of the country's capability to stage an international event but also an outlet to make the philosophy behind the Olympics, 'Olympism,' a grassroots campaign capable of promoting national integration, youth, and sports development within the country. By hosting the Olympics, India has an opportunity to live up to these values and uplift its stature in the world. Academic institutions shall also gain, since hosting of the Olympics shall instil a desire to excel in young population and combine education and sporting activities to reach their Olympic aspirations. Another key opportunity presented by this mega sporting festival is the consolidation of India's presence in the global geopolitics. It could assist India in its aspirations to have permanent representation at the United Nations Security Council and enhance the international standing of the Country. Hosting of Olympics

2036 will enable the showcasing of India's cultural diversity to enhance sports culture of the population, tourism and promote patriotism. Sports development is an area that other colleges and universities can turn into for students by providing quality training facilities for the succeeding sports professionals. The success of India's bid will depend on a multi-stakeholder approach which will entail collaboration between sports associations, Indian Olympic association and the central government. Recent development of spotting culture, creating Olympics in children and youth ,triumphs in various International games including the recent Asian Games and Paris 2024, may help the country's quest for a place in the Olympic Games.

Symposium 5

Prof. Dr. J. Hans de Ridder (Chair)
Founder Secretary General and Current President, BRICSCESS
President, BRICSCESS Congress 2019
Board of Directors, GCH
Senior Vice-President, ISAK
Director, School of Human Movement Sciences
North-West University-Potchefstroom
South Africa

Prof. Dr. J. Hans de Ridder is a full professor and director of the School of Human Movement Sciences at the North-West University in Potchefstroom, South Africa. He is currently a C1 rated researcher of the National Research Foundation (NRF) of South Africa. He was the receiver in 2002 of the Stals Award for Human Movement Sciences from the South African Academy for Science and Art for his exceptional contribution to kinanthropometry. In 2011 he was the receiver of the Albert Strating Award for Preventative Medicine, also from the South African Academy for Science and Art. At the age of 39 years, he was one of the youngest recipients of the Stals award and also the first in the history of the School of HMS at the North-West University in South Africa. In 2010 he reached a milestone in his research career, when his 50th post graduate student (M's and Ph.D.'s) graduated. Currently a total of 66 students have completed their masters or doctoral studies under his guidance. He was the author or co-author of a total of 84 research articles published in subsidised academic journals. He is the Senior Vice-President, ISAK; Member of the Board of Directors of the GCH Foundation; President, GoFPEP 2014 and the Founder Secretary-General and current President of the BRICS Council of Exercise and Sport Science. He was also the president of the BRICSCESS 2019 congress in Cape Town as well as president of the Sport Science Summit in South Africa in 2024. He is married to Elsie, a math teacher, and they have four children Elé, De Wet, Maret and Melinda.

Physical Activity Levels of Children and Adolescents in South Africa: Challenges and Solutions

Physical activity levels among children and adolescents in South Africa are alarmingly low, with many failing to meet daily activity guidelines. This issue arises from factors such as urbanization, increased screen time, lack of safe recreational spaces, and socio-economic inequalities. Urban areas often lack parks or safe spaces for play, leading to a shift towards sedentary activities like watching television or playing video games. This contributes to rising obesity rates and health problems such as diabetes and cardiovascular diseases. Additionally, children from low-income communities face greater barriers to physical activity, such as limited access to sports equipment and organized activities. Schools often do not prioritize physical education, further limiting opportunities for exercise. Addressing these challenges requires a comprehensive approach. Schools should prioritize physical education, making it a mandatory part of the curriculum and ensuring it is adequately funded. Community-based programs that encourage active lifestyles, particularly in under-resourced areas, are also vital. These could include after-school sports and partnerships with local clubs to improve access to facilities. Urban planning must focus on creating safe, accessible public spaces such as parks and playgrounds. Public health campaigns can also raise awareness about the importance of physical activity. By engaging schools, parents, and communities, South Africa can improve the physical activity levels of its youth, promoting better health and well-being.

Prof. Dr. Juan Jian
Director, Fitness and Health Branch, The International WuYI Federation
Executive Council Member, China Fitness Qigong Association
Executive Board Member, Young Scholars Committee of Chinese Wushu Academy
National Referee, Wushu Routine and Health Qigong
Wushu and Dance Department
Shenyang Sport University
China

Prof. Juan Jiang is a foreign aid expert of Chinese Health Qigong , a candidate of China Health Qigong Elite Program, and an advanced individual to promote Health Qigong. In September 2011, she participated in the 4th International Health Qigong Exchange Competition held in Vancouver on behalf of China, and won the first prize of collective Yi Jin Jing and Wu Qin Xi, and the champion of individual Yi Jin Jing. She has gone to more than10 countries such as the United States, Germany, Portugal, the Netherlands and Belgium to carry out Health Qigong promotion activities, participated in the third United Nations Chinese Language Day Health Qigong Exhibition, New York International Health Qigong Day, and China's headquarters in the European Union Health Qigong Exhibition, lectured at the Chinese Embassy in New York, the European Union, Yale-China Institute of Yale University, the Medical Faculty of Munich University and other places, and served as the main lecturer of the BRICS Health Qigong Training Camp in 2023 and 2024. She has published more than 40 articles in academic journals, 5 of which were included by SCI and 1 by SSCI. Her research interests include Taijiquan, Health Qigong culture and fitness mechanism, national and traditional sports culture and education, and sports intangible cultural heritage inheritance and innovation.

The International WUYI Federation: Promoting Health through a New Trend of Combining Wushu and Chinese Medicine

Health has been the pursuit of human beings. In addition to diet and sleep, sport and medical treatment are important means for people to get healthy. The sports with Chinese characteristics are martial arts, taijiquan (shadow boxing), qigong (deep breathing exercises) etc. Medical care with Chinese characteristics is called Chinese medicine. Scientific research has shown that continuing to practice Wushu, Qigong and Tai Chi etc. has a good effect on people's nervous system, circulation, bone health, digestion, immunity, endocrine and motor system and psychological factors such as anxiety, depression and self-efficacy. Chinese medical acupuncture and massage can effectively relieve the physical discomfort caused by subhealth. In order to further promote Chinese sports and Chinese medicine, and benefit human health, after three years of preparation, the International WUYI Federation was established in November 2024. The International WUYI Federation is a global non-profit charitable organization voluntarily formed by Wushu, Tai Chi, WuYi Fitness and Traditional Chinese Medicine practitioners and enthusiasts from various countries and regions. The Objectives are to build an international platform that gathers global Wushu and TCM experts, scholars, practitioners, and enthusiasts. Through organizing Wushu and TCM -related international educational activities, training, and exhibitions, actively promote the deep integration and innovation of Wushu and TCM, vigorously promote the practice of Wushu and TCM skills, promote human health and longevity, benefiting people worldwide.

Prof. Dr. Jorge Mota
Director of a Research Unit (CIAFEL)
President of the Scientific Council
Member of General Assembly
Faculty of Sports
Porto University
Portugal

Prof. Dr. Jorge Mota received his Ph.D. in Sport Sciences from the Faculty of Sport Sciences in Porto (Portugal). He did an internship in Deutsche Sporthochüle Köln (Germany) and spent part of his sabbatical semester at San Diego State University (USA) in 1998 and 2019. Prof. Mota is currently professor of exercise and health, as well as health education and promotion at the Faculty of Sport Sciences (Portugal). He was a visiting professor at Coventry University, UK, as well as in the Federal University of Paraiba and State University of Pernambuco, both in Brazil. He was a former dean of the faculty of Sports during a two-year appointment (1996-1998) and President of the Faculties' Scientific Board (2006-2010 and 2023….) Besides, he was in charge as President of the General Assembly from 2000-2018 and a member of the University of Porto General Council since September 2023. Since 2004 he is the Director of the Research Centre in Physical Activity Health and Leisure (CIAFEL), which is supported by the Portuguese Scientific Foundation, and more recently (2020), he was appointed as director of the PhD program in Physiotherapy. He was on the editorial board of several journals, such as Preventive Medicine and Journal of Physical Activity and Health, and BMP public health Associate Editor until July 2020. His main research focus is related to physical activity and health relationships, namely, non-communicable diseases. He is also involved in developing and implementing programs related to physical activity and health promotion. I have published several papers in peer-reviewed publications (ORCID: 0000-0001-7571-9181).

Neighborhood Environment, Socioeconomic Conditions, and Independent Mobility Related to Health

The relationship between neighborhood environment, socioeconomic conditions, and independent mobility is integral to understanding health outcomes. Most Portuguese adults are at risk because they spend much time in ST and little time in PA. Specific strategies to increase the levels of PA should be developed, which may include increasing the time spent on active commuting, frequent taking of active breaks at work, and more time spent on active leisure activities. Neighborhood environments encompass physical attributes such as walkability, green spaces, and safety, directly influencing residents' physical activity levels and mental well-being. Socioeconomic conditions, including income, education, and employment, further shape access to resources that promote healthy lifestyles. Disparities in these conditions often result in significant health inequities. Independent mobility, the ability to move freely and safely within one's environment, is crucial for physical and mental health. However, barriers such as crime, inadequate infrastructure, and social isolation can restrict mobility, particularly for vulnerable populations like the elderly, children, and those with disabilities. Research indicates that neighborhoods with higher socioeconomic status tend to provide better environments for independent mobility, characterized by safer streets, better-maintained public spaces, and more accessible amenities. Conversely, lower socioeconomic areas often lack these features, contributing to higher rates of chronic diseases, mental health issues, and reduced life expectancy among their residents. Indeed, recent data on Portuguese youngsters showed that many Portuguese children and adolescents are not sufficiently active or fit enough to set urgency for effective strategies. Particular attention should be given to Active play, Active transport, and Organized Sports Participation as their grades have decreased. Efforts to enhance neighborhood

environments, ensure safety, and promote socioeconomic upliftment can foster independent mobility, improving health outcomes. Overall, enhancing neighborhood environments and addressing socioeconomic inequalities are essential to promoting health equity and independent mobility for all community members.

Assoc. Prof. Dr. Alex Hou Hong Ng
Malaysia University of Science and Technology
Founding President, Malaysiann Association of Business and Management Scholars
Honorary Fellow, Oklahoma City University
Executive Director, Seremban Branch cum
Director, Corporate Learning & Development
Cheng & Co International Berhad
Malaysia

Assoc. Prof. Dr. Alex Hou Hong Ng, Ph.D. is an Executive Director of Seremban Branch and Director of Corporate Learning & Development of Cheng and Co International Berhad, the largest homegrown audit and business advisory firm in Malaysia. He is the Associate Professor at the School of Business, Malaysia University of Science and Technology. He was also the Senate Member and Associate Professor at Faculty of Business & Communications, INTI International University, Head of School of Business & IT at New Era University College, and a Senior Faculty Member at Taylor's Business School, Taylor's University and Swinburne University of Technology, Sarawak Campus. He was appointed as an Adjunct Associate Professor of INTI International University in 2024 and Visiting Professor of Polytechnic University of the Philippines in 2019. Prior to his academic career, he was a practitioner in the field of sales and marketing with various multinational and local corporations in different industries, including industrial electronics, consumer electronics, telecommunications, and executive development. Dr. Alex Ng has vast experience working with organisations and individuals from different cultural backgrounds in various countries, such as Japan, Korea, Thailand, Vietnam, and Taiwan. In recognition of his active social contributions, he was conferred the Medal of Outstanding Community Service (PMC) in 2014 and the Star Class Medal of Loyal Member of Negeri Sembilan (ANS) in 2023 by His Royal Highness Tuanku Muhriz ibni Almarhum Tuanku Munawir, the Ruler of Negeri Sembilan State of Malaysia.

Mental Health Awareness in Malaysia's Private Sector: Innovative Strategies for Holistic Employee Wellbeing

Although mental health issues in the workplace have been on the rise, they have mostly gone unaddressed in the private sector in Malaysia. This study will introduce an innovative approach for increasing mental health awareness in Malaysian companies and ensuring appropriate support for their employees, thereby integrating their mental and physical wellbeing. To support the points made in this study, the latest research and relevant case studies will be analyzed. To begin, the current state of mental health in Malaysia's workforce and contemporary challenges in establishing programs for mental health will be discussed. In particular, three aspects will be highlighted: (1) the development of culture-focused education about mental health – initiating meaningful conversations on a sensitive topic; (2) technology for improved accessibility of mental health support – when the greatest availability of this support is crucial, and (3) creating organizational policies focused on establishing practices that ensure that mental wellbeing is supported. It is assumed that the findings

of the study conducted to examine interventions for mental health delivered in progress in the Malaysian context, such as mindfulness and the use of online platforms for mental health assistance and peer support services, can be helpful. The role of the leaders of the company in promoting a culture conducive to mental health and the possible economic advantages of focusing on the mental health of employees are important topics to be raised. This combination of the analysis of the effective approaches used in other private sectors of Malaysia and the practical advice is expected to become a basis for the shared experience and inspiration for future actions aimed at increased awareness of mental health issues in the Malaysian private sector and further efforts for supporting their employees in these terms.

Symposium 6

Prof. Dr. Gıyasettin Demirhan (Chair)
Board of Directors, GCH
Board of Directors, WLO
Head, PE and Sports Teaching, Faculty of Sports Sciences, Hacettepe University
Member of Turkish National Olympic Committee
Former President, Turkish Sports Sciences Association
Former Dean, Faculty of Sports Sciences
Hacettepe University
Turkey

Prof. Dr. Gıyasettin Demirhan is working at Hacettepe University, Faculty of Sport Sciences. He is the Head of Physical Education and Sport Teacher Education Department. He is a member of some international and national scientific/professional associations like The *Foundation* of *Global Community Health (*GCH), World Leisure Organization (WLO), Association Internationale des Écoles Supérieures d'Éducation Physique (AIESEP), Fédération Internationale d'Education Physique **(**FIEPS), World Physical Education Alliance (WPEA), Turkish Sports Science Association (SBD), Turkish National Olympic Committee (TMOK), Turkish Sports Volunteers Association (SGD), and Turkish Mountaineering Federation. His research interests are critical thinking, information communication technologies, the relationship between physical activity and academic performance/cognitive functions, and risk perception in outdoor-adventure sports & activities. He is also interested in the philosophy of science and the ethics of scholarly and scientific publishing. He has been involved in mountaineering, trekking, hiking, mountain skiing, photography, and nature tourism for many years. He published 40 articles in international refereed journals and 55 articles in national refereed journals. He also has two books and 22 book chapters in physical education and sports sciences. He presented more than 125 papers at international and national scientific congresses and completed 24 international and national scientific research projects in his research field. He was a keynote and invited speaker at many national and international scientific meetings. Also, he organized more than 30 international and national scientific meetings. He was the editor of Hacettepe Journal of Sport Sciences (TR Index) for many years. He is the field editor of Physical Education and Sports of Education and Science (WoS) journal. In addition, he is one of the academic advisors of many international and national scientific journals and a referee for many journals. He has nearly 5000 citations in Google Scholar and almost 500 in WoS and Scopus.

Functional Responses in the Relationship Between Physical Activity and the Brain

This presentation has two main aims. The first aim is to show physical activity's effects on brain functions and academic achievement. The second is the relationship between physical activity and brain functions & academic achievement. Today, exercise, dance, and sport are among the basic needs of human beings. Because the foundation of education lies in the education of the body. Therefore, human motion is systematically diversified into exercising, dancing, and engaging in sports. Evidence from various sources in the literature supports the idea that participating in physical activities, dancing, and sports can enhance the holistic development of people. Strong and clear evidence exists for the physical domain. The evidence supporting the affective domain is increasing quickly. Evidence of the positive effect of physical activity on cognitive domain characteristics is less numerous. However, the following can be said: Physical activity, as an umbrella concept that includes activities such as exercise, dance, and sports, positively affects not only our body but also our brain in all aspects. Brain breaks and structured physical activity practices are among the leading studies investigating how physical activity affects brain functions and academic achievement or the relationship between the two variables. New studies indicate that the brain can change and adapt,

revealing that various aspects of life and cognition can be influenced by exercise. Numerous research findings, including our own, suggest a beneficial link between physical activity cognitive functions, and academic achievement. The presentation will back up the topic with existing literature and demonstrate it through the findings of three separate studies we carried out.

Dr. Miranda Sau Lin Chin, MFA, MBA, DBA
Past Vice Chair, Hong Kong Dance Federation Ltd.
Examiner, Beijing Dance Academy Graded Examination on Chinese Dance
Artistic Director, Miranda Chin Dance Company
Principal, Danceland School
Hong Kong

Dr. Miranda Sau Lin Chin obtained her Doctorate degree in Business Administration upon graduation from the Newport University of the United States, Master of Fine Arts in Dance from The Hong Kong Academy for Performing Arts, and as a senior Visiting Scholar at the Beijing Sport University. She was listed as a modern dance choreographer of the first generation in Hong Kong by a book entitled Dance History of Hong Kong in 2001. There were over 100 pieces of creative dance work choreographed by Dr. Chin and tour performed over 10 countries. She won the Dance of the Year Award from the Hong Kong Artists' Guild in 1989, was listed in the Who's Who of Contemporary Achievement, received the World Lifetime Achievement Award by the American Biographical Institute, and was awarded as one of the "Top 100 Artists 2017 from the International Biographical Centre of Cambridge, the United Kingdom. Since 2001, she has created a series of 8 episodes of contemporary Chinese cultural dance "Martial Arts and Tai Chi", which embodied Chinese philosophy, martial arts and the harmony with the nature. She gave touring lectures at universities in China, Hong Kong and Taiwan. Dr. Chin wrote two books, "Wuji" in 2010 - to share the process and experience of her exploration, realization and experimentation during the creation of dances for Wuji; and "I Dance From Nothingness" in 2020 - to narrating her 50 years creative journey in dance. In 2023, Dr. Chin started a new journey of creation to combine painting in dance, invited Dr. Kan Tai-keung, a famous Chinese Ink Artist, as the first partner, and created "The Way of Painting in Dance".

Dancing with the World: Aim for Globalize Harmony with Holistic Health through Performing and Education

Dr. Chin's Dance = Chinese Culture + Ink Painting + Martial Arts + Contemporary Arts

In 2024, Dr. Chin's production "Hè The Rite of Spring" has been awarded funding from the "China National Arts Fund" for touring performance in Hong Kong and the Greater Bay Area. "Hè" is the balance between the body and mind with nature, harmony with the heart and inclusion of artistic living. "The Rite of Spring" is the fusion of one of the first examples of modernism in music and the movements of Chinese cultural martial arts Tai Chi, presented in a contemporary style. Dr. Chin will explain the creation process, including how she did the research and development. We see and feel then we dance, we dance to show what we see and feel, that means dance is body language. It is therefore dances are the history of people's culture and philosophy. Dr. Chin's dance tells the contemporary ways, shows the culture and spirit of Chinese. Through explanation, video, this presentation may lead students and professionals to understand what Dr. Chin's dances bring to them …… Chinese culture, Chinese ink painting, good health, spiritual state via contemporary dynamic movement. In education, Dr. Chin conducts seminars and workshops to schools, including universities, secondary, primary schools and the communities. She also shares her concept and

process of her recent artistic development on merging Chinese culture into simplified dances for promoting Chinese culture and health, which is now has over 56 countries applying it.

Asst. Prof. Dr. Rajkumar G. Karve
Head, Department of Physical Education,
College of Agriculture, Kalaburagi, University of Agricultural Sciences,
India

Assist. Prof. Dr. Rajkumar G. Karve is an accomplished academician and sports professional with over 15 years of teaching, coaching, and research experience in Physical Education and Sports Sciences. His career journey includes roles as Lecturer, Guest Faculty, Coach, Selection Committee Member, and Research Fellow, reflecting his multidimensional expertise. He is a Scientific Adviser, The Foundation for Global Community Health (GCH), Las Vegas, USA and holds international memberships of ACESS (Singapore), IAHPEDS (USA), IFPEFSSA, NAPESS (INDIA). His professional contributions extend to serving as Associate Editor, Editorial board member and reviewer of Journals, contributing globally to Physical Education, Sports Science, and Research. Actively serving as Youth Red Cross Officer, Tobacco Control Secretary, and contributor to conferences as organizer, chairperson, and resource person. He has published 42 research articles, authored books, and contributed chapters in reputed publications and presented over 50 papers in national and international conferences and delivered lectures as a resource person at several academic forums. and life member in prestigious international and national organizations. Recipient of 17 national and international awards, including the Peace and Sport Award 2025 (South Korea) and Sport India Award 2024 (New Delhi) and has made outstanding contributions to teaching, research, and sports promotion. A former university and state-level cricketer, he continues to inspire through his academic leadership, research excellence, and commitment to youth development in sports.

Yoga Science as a Multidimensional Discipline: Integrating Ancient Wisdom, Scientific Approaches and Holistic Benefits to Human Body

Yoga, one of the most profound legacies of Indian heritage, has evolved from a spiritual discipline into a multidimensional science embraced worldwide. Rooted in ancient texts such as the Patanjali Yoga Sutras, it is not merely a system of postures but a comprehensive philosophy harmonizing body, mind, and spirit. In recent decades, scientific inquiry has validated many of its practices, transforming yoga into an evidence-based approach to health and well-being. From a physiological perspective, yoga asanas enhance muscular strength, flexibility, balance, and cardiovascular efficiency. Breathing techniques (pranayama) improve lung capacity and oxygen utilization, while relaxation and meditation regulate the autonomic nervous system, reduce cortisol levels, and strengthen immunity. Psychologically, yoga has been shown to alleviate anxiety, depression, and stress, fostering emotional stability and cognitive clarity. Socially and spiritually, yoga nurtures values of self-discipline, compassion, and mindfulness, creating harmony within individuals and communities.Contemporary research highlights yoga's role in preventive and rehabilitative medicine, supporting conditions such as hypertension, diabetes, obesity, and lifestyle-related disorders.

Neuroscientific studies reveal structural and functional brain changes in long-term practitioners, linking yoga to enhanced attention, memory, and resilience. Its adaptability also makes yoga inclusive-benefitting children, athletes, working professionals, and the elderly alike. Thus, yoga emerges as a holistic health science, integrating ancient wisdom with modern scientific validation. It is not limited to curative practices but offers a sustainable model for lifestyle management and human development. As a multidimensional discipline, yoga bridges tradition and modernity, spirituality and science, ultimately contributing to physical vitality, psychological balance, and inner harmony. In conclusion, yoga science stands as a timeless tool for human flourishing, reminding us that true well-being arises from the integration of body, mind, and spirit.

Prof. Dr. Rajesh Kumar
President, International Federation of Physical Education, Fitness and Sports Science Assn
Secretary General, Indian Federation of Computer Science in Sports
Dean, Faculty of Education
Osmania University
India

Prof. Dr. Rajesh Kumar has obtained his Bachelor degree, Masters degree and doctoral degree in Physical Education from Osmania University, Hyderabad and Diploma in Sports Coaching in Athletics from Sports Authority of India. He is presently working as Senior Professor in Physical Education and Dean, Faculty of Education, Osmania University, Hyderabad, T.S. India. He is Visiting Professor, Faculty of Sports Sciences, Universitas Negeri, Yogyakarta, Indonesia in the year 2020. He holds Previously many administrative Positions i.e. Principal, University College of Physical Education, Osmania University, Head, Department of Physical Education, OU, Secretary, Board of Control, Inter University Tournaments,OU, Director of Physical Education,OU,Secretary, Inter College Tournaments, OU, Chair Person, Board of Studies in Physical Education, Osmania University Satavahana University, M.G. University, Nalgonda and Kakatiya University and Palamuru University. He is the President, International Federation of Physical Education, Fitness and Sports Science Association and Secretary General, Indian Federation of Computer Science in Sports Former Board of Director, International Association of Computer Science in Sports. Board of Director, BRICS Council of Exercise and Sports Science. He is a International Master Athlete participated in the World Masters Athletics Championships held at Finland 2009 and Asian Masters Athletics Championships held at Thailand 2009, Malaysia 2010, Chinese Taipei 2012, Singapore 2016.Bronze Medalist in 5000 M Run in the Asian Masters Athletics Championships held at Bangalore 2006.. He is Indian Athletics Team Coach in the 30th World Universiade held at Napoli, Italy from 2nd to 14th July 2019. He has participated and Present the papers in the International Conferences at London, Japan, China, Istanbul, Mauritius, Thailand, Philippines, Indonesia, Vietnam, Malaysia, Bahrain, Sri Lanka etc..He is a Chief Editor of International Journal of Health, Physical Education and Computer Science in Sports and Asian Journal of Physical Education and Computer Science in Sports.

Role of Play for the Development of Children's Skills in Indian Education System

Play activities within schools play a crucial role in establishing a solid foundation for the development of comprehensive physical abilities and creating opportunities for recreational engagement among Indian school students. In India school education system includes Rural Education and Urban Education which differs each other in education system. Private and Government Schools differ in providing opportunities to the students. Play is an important part of child development. Play helps children to learn social and psychomotor skills. The physical education curriculum constitutes an integral segment of India's school education framework which is useful for the development of

Physical, cognitive and other skills among the students. The subjects covered during outdoor physical education classes include Traditional Sports, Yoga, Kabaddi, Kho, Mass Drill exercises, and more. Students acquire a diverse range of motor skills and cultivate good health and fitness. Our Physical Education classes, while honing fundamental movement skills for adeptness in sports, also encompass components related to nutrition and dietary habits. Play fosters the development of essential life skills and enhances coping mechanisms among schoolchildren. Play allows children to gain control of their thoughts, feelings, action and helps them achieve self-confidence. Play helps the children to identify and promote talent which helps to choose the correct sport to become the future champions of the country. In India Physical Education classes in Urban and Rural helps the child to develop the skills for the all-round development. Engaging in recreational activities in natural settings contributes positively to physical, mental, and overall health. Play is very important in children's life for the whole some development of the Personality.

Prof. Dr. Vanessa Lentillon-Kaestner
Teaching and Research Unit in Physical Education and Sport (UER-EPS)
University of Teacher Education
Switzerland

Prof. Dr. Vanessa Lentillon-Kaestner is currently teaching in the Teaching and Research Unit in Physical Education and Sport (UER EPS), University of Teacher Education, State of Vaud (HEP Vaud), Lausanne, Switzerland. She earned her PhD in 2006 from the University of Sport of Lyon (UFR-STAPS, Lyon 1), France, with a thesis on gender inequalities and perceived injustice in physical education. Between 2006 and 2012, she worked at the University of Sport of Lausanne (ISSUL, Lausanne), Switzerland, where she taught sport psychology courses and conducted research on health and risky behaviors (eating disorders, doping behaviors) in sporting activities. From 2010 to 2012, she was associate professor (50%) at the University of Teacher Education of the State of Vaud (HEP Vaud Lausanne), and since 2012, she has held a full professorship (ordinary professor). From 2019 to 2025, she is the head of the Teacher and Research Unit in Physical Education and Sport (UER-EPS). Her research focuses on the effects of various teaching methods and pedagogies (such as the Jigsaw method, Assessment for Learning, interdisciplinary teaching, active video games) in physical education on student outcomes, including health, interest, learning, perceived competence, and enjoyment. Additionally, she researches teacher well-being from a holistic perspective, considering both contextual and personal resources, and examines the specific effects of physical activity and sedentary behaviors on teacher well-being. She has secured various external funding for her research projects and published extensively in scientific and professional journals. She also developed a professional journal (https://www.revue-epm.ch) to disseminate research findings in physical education classes.

Eating Disorders Among Women: The Role of Fitness Sport

According to the World Health Organization (WHO), health is a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity. Physical activity plays a crucial role in maintaining and improving overall health. However, unhealthy deviant behaviors, such as eating disorders or doping, can emerge in the context of physical activity, often linked to excessive commitment or specific characteristics of the sport. For example, the risk of developing anorexia is higher in certain sports, such as aesthetic sports, endurance sports, weight-category sports, and

sports involving vertical movements (e.g., ski jumping), where a slender, light body is often required for optimal performance. Additionally, some individuals suffering from anorexia symptoms use endurance sports (e.g., running) to lose more weight. More specifically, the purpose of our study was to better understand the role of fitness sports in the development of anorexia among women, using a mixed-methodological approach. A total of 264 female participants responded to a questionnaire, and 30 women were interviewed (16 with clinical anorexia and 14 without). Results showed that 8% of fitness sport participants were at risk of developing eating disorders. The role of fitness sports appeared to be ambivalent in the development of anorexia. Fitness sports are sometimes used to lose weight, sometimes to enable more eating, or as part of anorexia treatment. Women suffering from anorexia primarily engage in free, individual, cardiovascular activities. Prevention efforts should primarily target cardiovascular fitness classes in fitness centers, as well as participants in free cardiovascular activities.

Phoenix Wai Ching Tong
Chairperson of School Ethos Development
And Student Nurturing Committee
Baptist (Sha Tin Wai) Lui Ming Choi Primary School
Hong Kong-China

Phoenix Tong earned a Bachelor Degree of Education with major in Physical Education in the Hong Kong Institute of Education and a Master Degree of Education with major in Curriculum design and development. She is now the Panel Head of Physical Education and Health Subject and the Chairperson of School Ethos Development And Student Nurturing Committee in Baptist (Sha Tin Wai) Lui Ming Choi Primary School. She was one of the key committee members in the Physical Education curriculum reform, which promotes the integration of information technology into Physical Education classes in order to cultivate a healthy and active lifestyle, thereby facilitating the school in becoming a model school in Hong Kong. In 2017, Phoenix had the honor to receive the Chief Executive's Award of Teaching Excellence, which was organized by the Education Bureau with funding support from the Quality Education Fund. Moreover, she was invited by the Education Bureau of Hong Kong as a model teacher for quality teaching in PE and to participate in the secondment to the School Support Partners Scheme under the School-based Professional Support Programmes. Under the scheme, Phoenix supported frontline PE teachers in designing the learning programme in FM curriculum, the PE curriculum in Key Stage 1 (primary 1-3), by using effective learning and teaching strategies and creative learning activities. Phoenix has also conducted a number of class demonstrations and presentations for teachers' development which are organized by the Education Bureau of Hong Kong and the Hong Kong University of Education.

A Holistic Approach: Fostering Mental Well-Being in Active and Healthy Campus in Hong Kong-China

Baptist (Sha Tin Wai) Lui Ming Choi Primary School first proposed the implementation of an Active and Healthy Campus over fifteen years ago. Under the leadership of Principal Dr. Louisa Mei Sin Tang and with support from School Consultant Prof. Ming Kai Chin, along with other international experts, the school has integrated numerous innovative ideas into its development through sustained professional development for teachers. The establishment of a healthy campus reflects Baptist Sha Tin Wai Lui Ming Choi Primary School's commitment to fostering a culture of physical health and

wellness among students. In the past decade, the school has incorporated positive education elements to further support students' mental health in four areas. They are Learn it, Live it, Teach it and Embed it. Integrating positive education into campus culture by combining it with school policies, research, environmental settings, and comprehensive activities. Through the collective and coordinated effort of executive committees, various health-related measures have been carried out for further supporting students' mental health. The school also optimize the school timetable and school curriculum. Various topics such as health and wellness, environment sustainability, life education, etc. had been introduced into the curriculum with innovative learning activities for a whole person development. Finally, through the integration of several aspects of the United Nations Sustainable Development Goals and the framework of Whole School, Whole Community and Whole Child (WSCC) Model, the off-campus and on-campus curriculum. Also, the participation of community, parents, teachers and students, a holistic approach of Active and Healthy Campus which fostering students' mental well-being has been developed.

Workshop Speakers

Workshop 1: Dance and Wellness

Assoc. Prof. Demet TEKIN (Workshop Co-ordinator)
Physiotherapy and Rehabilitation Department
Faculty of Health Sciences
Istanbul Rumeli University
Turkey

Assoc. Prof. Dr. Demet Tekin, PT, Ph.D. is recognized as the first Dance Physiotherapist in Turkey. Now, she is working at Physiotherapy and Rehabilitation Department, Faculty of Health Sciences in Istanbul Rumeli University. Tekin holds two master's degrees and a PhD in Sports Sciences. Throughout his academic career, he has worked in various sports fields, including football, volleyball, basketball, tennis, swimming, rowing, motorsports, and dance, gaining expertise in these areas. Having been a dancer for nearly 20 years, Tekin has focused particularly on injury prevention, protective rehabilitation, and performance enhancement in dancers, conducting scientific research and publishing international papers on these topics. He has also made significant contributions to the treatment of neurological, pediatric, and geriatric patients through dance therapy. With over 17 years of professional experience in Flamenco, Tekin has taught at the Flamenco Dance Academy he founded, Kalkedon Flamenco Dance Academy, and other dance schools, successfully training many students and organizing end-of-year performances. In 2017, he founded the Labranza Dance and Music Ensemble, performing across various cities in Turkey. Additionally, he participated in the “Faslı Flamenco” project, which blends Turkish and Spanish cultures, contributing to the European Union Intercultural Project. Having discovered the physical and psychological benefits of dance through both scientific and personal experiences, Tekin has adopted the mission of sharing these positive effects with a wider audience. To this end, he conducts specialized training sessions and workshops to share his knowledge and expertise. In October 2023, she chaired the 1st International Dance Science Congress, contributing to the advancement of dance science.

Physical, Social and Psychological Benefits of Flamenco Dance

Flamenco, recognized by UNESCO as part of the Cultural Heritage list and celebrated globally, is not just an art form but a profound expression of human emotion, characterized by its passionate intensity and elegant, yet commanding, posture. The dance captivates audiences with its rhythmic complexity and emotional depth, often telling stories of love, struggle, and resilience. During Flamenco performances, both aerobic and anaerobic energy systems are actively engaged due to the dynamic shifts between fast and slow tempos. This unique structure stimulates afferent neuronal activity in the cerebellum, the region of the brain responsible for motor learning and coordination. These neuronal activations play a significant role in enhancing memory retention, as they facilitate the brain's ability to process and store motor skills. Additionally, Flamenco activates the hippocampus, which is involved in short-term memory processing, allowing for better encoding of information into long-term memory. Beyond cognitive benefits, Flamenco offers a wide array of physical, mental, and social advantages. Physically, it aids in weight control, improves cardiovascular health, enhances balance and coordination, and strengthens muscle tone. Mentally, the focused movements help sharpen concentration and increase mindfulness, while the performance aspect builds self-confidence and emotional resilience. Socially, Flamenco creates a sense of community and cultural appreciation,

fostering connections among participants. As a professional Flamenco dancer and experienced instructor, Tekin is deeply passionate about sharing the art of Flamenco through workshops. These sessions provide participants with an opportunity to explore both the theoretical and practical dimensions of Flamenco, aiming to spread its cultural richness and health benefits to a broader audience.

Chang Qing PEI, BFA, MA
Lecturer, Beijing Dance Academy (1996-2002)
Principal Dancer, “The Silk Road and Flower Rain”, Dance Theatre of Gansu Province (1985)
Principal Dancer, “The Overture of Kong Hou”, China Art Festival (1987)
Lecturer in Chinese Dance & Advisor for Master of Fine Arts Program, Hong Kong Academy for Performing Arts (2003-2022)
Dance Mistress, Hong Kong Dance Company (2002-2003)
Assessor, Hong Kong Art Development Council
Hong Kong China

Chang Qing Pei obtained her Bachelor of Fine Arts, Beijing Dance Academy. Master of Arts in Chinese Culture, Hong Kong Polytechnic University. She started her career as a dancer for the Gansu Provincial Song and Dance Ensemble, whose groundbreaking dance works are “The Silk Road & Flower Rain” and “The Overture of Kong Hou” from 1987, which received an Outstanding Performance Award from China’s Ministry of Culture. She had the exceptional opportunity to study firsthand the artworks in Dunhuang caves and toured extensively with the company to various cities of the world, including the La Scala theatre. Through decades of teaching and practice on stage and, since 2002 when she started teaching for the Hong Kong Academy for Performing Arts. Her rich experience in dance performance has been invaluable to her teaching career. The invitation by Ohio University to be a Visiting Scholar in Residency for a year has exemplified international peer recognition of her expertise. She published her study “Uniting Mind and Body - letting awareness guide movement” and the special lecture "About Dunhuang Dance's experience in teaching practice and teaching effectiveness". She has published papers and articles. She has been dedicated including being a dancer and artist to the research and choreography of Dunhuang dance, and various accolades including being an Outstanding Teacher Prize from China’s Ministry of Culture…

Chinese Dunhuang Classical Dance: Body Movement Promoting Physical and Mental Health

Dunhuang dance and its unique style and dynamic, It is a rhythmic exercise that involves different lines, its rhythmic movements help to cultivate a good mood and more effectively transmit the pleasure and aura brought by a happy mood to the whole body, which can not only improve overall health and help build self-confidence, but also enhance the imagination of the brain and improve the coordination of the body. This presentation session will be presented One of the Chinese cultural is Dunhuang arts. Iintroduce Dunhuang dance and its unique style and dynamic, it embodies the charm, unique rhythm of the Chinese Classical Dance and aesthetic taste of Chinese. thereby transforming the murals’ postures into beautiful dance performances, its own unique taste and perspective. All these are based on Chinese tradition aesthetics and traditional arts. Dunhuang dance emphasising a straight body to strike a posture with elements of “three-path bend”, “form” and “rhythm”, to experience the relationship between dance movement and physical and mental happiness, letting awareness guide movement, so we can achieve “unity of form and spirit, unity inside and outside”. This workshop will be presented in practical session most of the time with the objective of sharing through Dunhuang dance from theory to practice.

Workshop 2: Nutrition and Well-Being

Dr. Michelle Lombardo
President, The OrganWise Guys Inc.
USA

Dr. Michelle Lombardo is President of The OrganWise Guys Inc. and the author of The OrganWise Guys series, which promotes the benefits of good nutrition and preventive healthcare practices through creative characters playing the roles of the vital body organs. She designed this evidence-based program to engage children as young as three through age twelve and their families in an easy-to-deliver style for educators. Dr. Lombardo has been the Project Manager of multiple W.K. Kellogg Foundation-funded projects, including the most recent Thriving Communities, Thriving Children III (TCTC3), a project designed to improve young children's health and literacy status in a statistically significant manner. The OrganWise Guys Comprehensive School Program results are published in the Journal of the American Dietetic Association, the American Journal of Public Health, and the *Journal of Healthcare for the Poor and Underserved*. Dr. Lombardo is a co-author of the book chapters *Schools as *Laboratories* for Obesity Prevention: Proven Effective Models* and *School-Based Obesity Prevention Interventions Show Promising Improvements in the Health and Academic Achievements among Ethnically Diverse Young Children* (Global View on Childhood Obesity: Current Status, Consequences and Prevention. Elsevier, 2010, 2nd Edition, 2019). Dr. Lombardo received her D.C. from Life College of Chiropractic and was in private practice for ten years before starting The OrganWise Guys Inc., now in its thirty-first year of operation.

Healthy Kids, Healthy Future: The Global Benefit of Early Wellness Interventions

To achieve optimal performance in life, good nutrition and physical activity promotion must begin at an early age and be reinforced regularly through easy-to-understand materials that provide simple, consistent health messages and concepts. Integrating this knowledge in the classroom, in the community and at home provides steady support that helps to make the information stick. This presentation highlights a comprehensive, science-based solution that uses lovable characters that are organs of the body, such as Hardy Heart, Madame Muscle and Sir Rebrum, the brain, etc., to convey this healthy knowledge using a robust web-based digital platform with supporting print, and multi-media content. The program is designed for educators and caregivers to engage young children (and their families) in a way that makes them excited to choose healthy foods and physical activity to take care of their bodies because they understand the *why*. The approach is to *empower children to be healthy and smart from the inside out,* and to continue these behaviors for a lifetime. This model streamlines prevention efforts and helps communities use the same language and materials to reach a common goal. The research presented is published in top-tier journals on the school program (as well as new outcomes on the early childhood program demonstrating statistically significant improvements in literacy for PreKindergarten children) and shows statically significant improvements in children’s BMI percentiles, waist circumference, blood pressure and standardized test scores.

Workshop 3: Technology and Wellness

Ben Wells, MEd
President, Technology Association for Physical Education (TAPE)
TechActive Founder
CDE Trainer/Presenter
SHAPE America National Presenter
2016 SHAPE Colorado Secondary PE Teacher of the Year
Bennett Ranch Elementary School
USA

Ben Wells is an accomplished educator with a diverse background spanning physical education and cutting-edge technology integration. With a BS in Exercise Science and Physical Education from the University of Northern Colorado, and an M.Ed. in Integrating Technology in the Classroom from Walden University. Throughout his career in K-12 physical education and health instruction, Ben has not only held various teaching roles but has also made many contributions to the education community. He has written physical education curriculum for the Colorado Department of Education (CDE) and his dedication to enhancing the physical education learning experience through technology earned him the title of the 2016 SHAPE Colorado Secondary Teacher of the Year. He served as the Technology Director for SHAPE Colorado for several years and helped to encourage and improve the use of technology in health and physical education. Currently, Ben works at Bennett Ranch Elementary in Falcon, CO, where he teaches K-5 students. He serves as an active Lü Interactive Wall Ambassador, TAPE President, CDE Presenter and National Presenter for physical education. In Ben's classroom, technology isn't just a supplement; it's an integral part of daily lessons. He empowers his students to view technology as valuable tools, not mere toys, ensuring they acquire essential digital literacy skills while developing the skills needed for a healthy active lifestyle. Beyond the classroom, he presently conducts physical education and technology training workshops for educators nationwide. As an ambassador for Lü Interactive, he champions interactive wall systems designed to revolutionize education. Ben's passion for technology helps him to focus on empowering all educators and students while enhancing all aspects of the educational landscape through seamless technology integration. He believes that technology, when used appropriately, can enhance the learning experience by offering interactive tools and resources that engage students and promote physical literacy.

Tech-Enhanced Physical Well-Being: Fostering Lifelong Health and Well-Being through Holistic Student Learning

Technology is revolutionizing physical education, physical activity around the globe. There are many innovative ways that technology can be leveraged to support the health and well-being of the whole child. This session highlights innovative methods to integrate technology, promoting physical, mental, and emotional development while equipping students with lifelong skills for maintaining health and wellness. We'll dive into how cutting-edge tech tools—such as wearables, fitness apps, and virtual platforms—can create personalized, engaging learning experiences that motivate students to set, track, and achieve wellness goals. Through the use of data-driven insights and gamification, students can actively engage in physical activity, making it fun and goal-oriented, fostering a long-term commitment to healthy lifestyles. In addition to physical education, the session will emphasize the importance of emotional regulation, social skills, and mental well-being. You'll discover how technology can aid in nurturing these areas, offering students comprehensive tools that address

stress management, teamwork, and self-reflection through a variety of engaging activities and assessments. The presentation also highlights cross-cultural examples of successful tech-enhanced wellness programs, offering a global perspective on how different regions are leveraging technology to enhance physical education. Educators will leave with actionable strategies to integrate inclusive, adaptable physical activity programs that cater to diverse learners with different abilities, learning styles, and backgrounds. By leveraging technology, educators can enhance physical activity experiences that promote lifelong engagement in sports, exercise, and movement. These tools not only support fitness but also empower students to develop holistic well-being habits that extend far beyond the classroom. This presentation will equip educators, wellness professionals, and tech enthusiasts with the knowledge and strategies to foster a generation of learners who are physically active, emotionally resilient, socially connected, and equipped for lifelong well-being.

Workshop 3: Media and Sports Journalism

Ronnie Teck Wei Teo
Executive Editor (Business) of The Borneo Post, East Malaysia
President of the Kuching Division Journalists Association 2011-2027
President of the Federation of Sarawak Journalists Association 2023-2025
Founding Board Member, Malaysia Media Council 2025
Swinburne University of Technology, Sarawak Campus
Malaysia

Ronnie Teck Wei Teo is a prominent figure in East Malaysia's media landscape, combining his expertise in business journalism with leadership roles in both state and national journalist associations. He currently serves as the Executive Editor (Business) at *The Borneo Post*, one of Sabah and Sarawak's leading English daily newspapers. In this capacity, he oversees coverage of economic and corporate affairs, shaping the business narrative across Sarawak and Borneo. With more than 15 years at the publication, Teo has developed deep insights into the region's economic developments and a reputation for accuracy and professionalism in reporting. Beyond the newsroom, Teo has dedicated himself to strengthening the journalist community. As the long-serving President of the Kuching Division Journalists Association (KDJA), repeatedly re-elected—including for the 2025–2027 term—he has driven initiatives such as training workshops, networking events, and the association's active participation in national platforms like the National Journalists' Day (Hawana). His leadership extends statewide as President of the Federation of Sarawak Journalists Association (FSJA), amplifying the voice of media practitioners across Sarawak. At the national level, Teo's influence was further cemented with his appointment as a Founding Board Member of the Malaysia Media Council (MMC). Following the gazettement of the MMC Act in 2025, he joined the inaugural twelve-member board, representing media professionals and associations. This historic role underscores his standing in the industry and places him at the forefront of establishing Malaysia's first independent self-regulatory media body. Through his work, Teo ensures that the unique perspectives of East Malaysian journalists are represented in shaping national ethical standards and codes of conduct. His career reflects a commitment not only to quality journalism but also to advancing the profession through leadership, advocacy, and institution-building.

The Role of Media in Elevating Sarawak's Sports Journalism

Sports journalism in Sarawak is an active and vital partner in realising the state's goal of becoming a Malaysian sporting powerhouse by 2030. As Sarawak prepares to co-host the prestigious 2027 SEA Games, the media's role in shaping public opinion, motivating athletes, and ensuring accountability has never been more critical. Journalists are essential in building the next generation of Sarawakian stars. By providing visibility to young talents in grassroots and state-level competitions, they transform promising athletes into local heroes, inspiring thousands of other youths across the vast region to pursue sports. This consistent reporting helps validate the significant investment made by the State Sports Council, showcasing the effectiveness of athlete development systems and ensuring the talent pipeline is inclusive of both urban and rural areas. The Sukan Malaysia (SUKMA) 2024 serves as the ultimate media proving ground. Coverage of SUKMA generates state-wide pride and excitement, reinforcing the resilient Sarawakian motto, "Agi Idup Agi Ngelaban" (Fight until the end). When Sarawak wins, media coverage amplifies the success, validating the state's massive investment in world-class facilities. Furthermore, the extensive coverage across diverse disciplines promotes niche

sports, ensuring a broad and balanced base for future national teams. With the 2027 SEA Games on the horizon, sports journalism must pivot to meet an international standard. The media's responsibility is two-fold: to provide expert, high-standard analysis of the athletes' performance, and to promote Sarawak as a prime sports tourism and cultural destination. By highlighting the economic benefits and the successful utilization of upgraded infrastructure, journalists will help ensure that the legacy of the Games benefits the entire community, cementing Sarawak's place on the regional sporting map. The media is, therefore, the essential link between the athletes' dedication and the public's pride.

GCH Senior Young Leaders (SYL) / Future Leaders (FL)

Dr. Antonin Kuban
GCH Senior Young Leader (SYL)
Director/Co-founder: Kindergarten Housenka and IMAGO individual learning school in Prague
Director of Music-based P.E. Program, teacher and trainer
Faculty of Physical Education and Sports
Charles University
Czech Republic

Dr. Antonin Kuban finished his Ph.D. degree in Kinanthropology at Faculty of Physical education and Sports at Charles University in Prague in 2019, after finishing his Master degree in pedagogy. His research is focused mostly on pedagogy in PE and children's psychomotor learning and development. In 2009 he started his pilot study of his educational program for pre-school children, focused on global pedagogy and all-round personal development using music and sport as a tool. His research interests include: pedagogy, sport psychology, motor and physical development, physical and musical intervention for pre-school age children. In 2013 he co-founded with his two sisters Kindergarten HOUSENKA (www.mshousenka.cz) and Individual learning school IMAGO with author global pedagogy educational program which includes his author Music-based PE program. He develops his author songs and movement compositions (Brain breaks) for children for better understanding different cultures and cultural environments. His private schools cooperate with many sports clubs, the same as the whole community around his kindergarten and school. He works on many projects connecting physical education and technology. In 2022 he has started to develop a project on movement analysis for children. During APCESS 2013 in Taiwan, he was a part of the first Future Leader Program (FLV) group under Prof. Ming-Kai Chin's leadings and advisory. As FLV and later as SFLV he participated in Global Forum on Physical Education Pedagogy (GoFPEP 2016) held in Turkey, BRICSCESS 2017 in Brazil, BRICSCESS 2019 in South Africa, 3rd BRICSCESS 2024-New Delhi in India.

Best Practice, Enhancing Children´s PA by Connecting Music and Physical Education in Kindergartens

The key period for a positive attitude towards PA is a youth, which is also a key period for building a positive relationship to the active and healthy lifestyle. This study is focused on creating new Music Based Physical Educational (MBPE) program for pre-school children in the Czech Republic, focused on all-round personal development by connecting music and movement, and on determining it´s effect. An additional effect of MBPE program should be the support of pre-school child's natural and comprehensive motor development, sensorimotor, musical and rhythmic competences with the stress on personal health and hygiene. To validate the effect of MBPE program, the study forms part of a longitudinal research design in kindergartens during nine months. Two experimental and one control group of pre-school children were chosen and observed. Test results before and after MBPE program intervention were ANOVA analysed. With pre-test and post-test use of a musical/motor test battery (Brtníková, 2007), we have witnessed major improvement in the children´s musical and motor skills, in aesthetical motoric exhibitions, in general in relation to the quality of motoric and musical skills and in feelings towards the music. The children acquired new competences from the fields of general knowledge and social communication too. The strengthening and deepening of the interpersonal boundaries and relationships among the children contributed to their orderliness and discipline. Considering our results, we can ascertain that MBPE program has a positive influence on,

not only a child´s musical/motor skills, but also on their acquisition of a wide set of new physical competences, experience, musical competences. As side effect we noticed also positive influence on social, cognitive and intellectual skills.

Prof. Dr. Dané Coetzee
Senior Young Leader (GCHSYL)
Board member – BRICSCESS
Immediate Past President – South African Professional Institute for Kinderkinetics (SAPIK)
Program Leader: Kinderkinetics
Faculty of Health Science
School of Human Movement Sciences
North-West University - Potchefstroom
South Africa

Prof Dr. Dané Coetzee is currently a full professor in the School of Human Movement Sciences at the North-West University's Potchefstroom Campus. Since 2019 she is the program leader of the Kinderkinetics program, where her training responsibilities at the NWU include modules on undergraduate and post graduate levels as well as guidance to several masters and doctoral students. Additionally, as part of the Kinderkinetics team she has conducted workshops for teachers, coaches from disadvantaged groups and other Kinderkineticists to improve and promote the importance of early childhood development Prof Coetzee's research focus and interests are currently on early childhood development and early intervention, motor development, physical activity and physical fitness, visual stimulation and sport vision, ADHD, DCD, and the influence of motor delays on children's academic skills. Furthermore, Prof Coetzee has been representing South Africa as a member of the Future Leader Volunteer Programme (FLV) under the advisory of Prof Hans de Ridder and Prof Mingkai Chin since 2016. As a senior Future Leader Volunteer (FLV) and co-team leader she has been participating in numerous international conferences. Prof Coetzee is currently a NRF C2-rated researcher, and several national and international publications have been published from her pen. She also serves as reference for a national and international journal respectively, and as an external examiner. She furthermore distinguished herself as vice president of academics of the South African Professional Institute for Kinderkinetics (SAPIK) from 2013 to 2016, as president of SAPIK from 2016 to 2019, and now as immediate past president of SAPIK since 2019.

Is there a link between BMI and motor proficiency in eight- to nine-year-old children in the North West province of South Africa: PERF-FIT study

Dané Coetzee, Bianca Botha, Nelia Roux & Demi-Lee O'Brien
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Overweight and obese children display lower physical activity levels and below the expected motor performance compared to children of normal weight. Researchers in developed countries report that children with higher BMI scores, displays lower motor performance than their peers. This study aimed to determine the relationship between BMI and motor proficiency in eight- to nine-year-old children. This cross-sectional study forms part of the PERF-FIT research study. One-hundred and eleven students (eight- and nine-years-old) participated in this study. The Bruininks-Oseretsky Test of Motor Proficiency 2nd Edition Short Form was used to measure the motor proficiency of the children. The BMI was calculated using height in meters and weight in kilograms. A Pearson correlation was used

to determine the relationship between BMI and motor abilities, followed by an independent t-test to evaluate any age differences. The results indicated a significant statistical negative correlation ($p \leq 0.05$; $r \geq -0.28$) with a small effect between BMI and motor proficiency. Overall, the eight-year-old group obtained a negative correlation with BMI ($r=-0.10$). The nine-year-old group had a strong statistically significant correlation with BMI ($r=0.62$). A significant difference regarding the following motor skills were reported between the groups: folding paper ($p=0.006$), copying a square ($p=0.011$), jumping in place - same sides synchronized ($p=0.006$), walking forward on a line ($p=0.005$), standing on one leg on a balance beam eyes open ($p=0.005$), and the SF total score ($p=0.052$). Children of the normal or underweight weight category had better motor skills than those of overweight or obese weight. As a result, early childhood obesity has a negative impact on motor ability development. As a result, physical activity opportunities for children with a higher BMI should be expanded to improve their motor proficiency.

Prof. Dr. Biljana Popeska
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Prof. Dr. Biljana Popeska is Professor at Faculty of Educational Sciences at Goce Delcev University in Stip, Republic of North Macedonia of both under graduated and post – graduated level. Since August 2023, she has been affiliated with the University of Luxembourg, Department of Education and Social Work. Her research interest is related with didactics of physical education for primary education, motor development of children, holistic learning through physical education, PETE and sport pedagogy. Since 2015 Popeska is a part of FLV program, serving as Senior Future Leader and national representative at Global Community Health Foundation. Her works is devoted on promotion of physical activity and active lifestyle in schools and among students, and advocating for quality PE. In this regard, she is member of different national and international associations. In this role, Popeska is Member of the Executive Board of European Physical Education Association (EUPEA) and Federation of Sport Pedagogues of Macedonia (FSPRM), Assistant national delegate of FIEPS, member of CEREPS, INSHS, EEPEN network. Her research work is presented in more than 100 publications of scientific and professional articles published in international Journals and proceedings books. She is author of two books and two handbooks related to PE and motor development of children, two manuals for students. Popeska is also a co–author of two book chapters for physical education. She is an active conference participant, with more than 50 conference paper presentations globally, at many of them as keynote speaker or invited speaker.

Physical education as a catalyst for social inclusion and gender equality: perspective of PE teachers from North Macedonia

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Schools are important setting not just for educational development of children, but also for building their social and communication skills and overall personality. Emerging trends of experiencing different forms of inequalities, social injustice, persisting stereotypes and discrimination are often experienced in schools among children at different age groups. On other hand, schools, through different curricular and extracurricular activities can facilitate development of social and communication skills, support critical thinking, problem solving and decision making, enhance motivation, empathy, resilience and perseverance. Having these in mind, we initiated a project titled "Sport for resilience". The project aimed to use sport play and PE contents as a lever for education and awareness and to empower youth to create more inclusive and resilient societies. The target group were children at the age 8 – 12 years old, students in primary schools in North Macedonia. Two educational kits, as packages of sport education content were developed and implemented in schools during PE classes, by PE teachers. The first educational kit was aimed to raise awareness of gender equality. The second educational kit was aimed to combat discrimination related to minority status in the school settings. A set of different games were incorporated within the kits following three-point structure: motivate, engage and make fun; play a game with certain topic related message and educate on a skill for certain topic; discussion and reflection for experiences. The paper presents experience from both students and teachers from two primary schools, from two different cities in North Macedonia. Their feedback, learnings and experiences are presented. Following their feedback, we provide suggestions on how to implement such contents in PE curriculum and school life in general.

Ng Yew Cheo
Senior Young Leader (SYL)
MSc Student
The Foundation for Global Community Health (GCH)
Nanyang Technological University (NTU)
Singapore

Ng Yew Cheo is working full-time and concurrently running and training competitively under her supervisor and coach, Dr. Balasekaran. She also does research that focuses on human performance, health and in physical education. Cheo has published numerous papers in peer reviewed journals, conference proceedings and book chapters even though she had just completed her undergraduate degree. She is the Secretary General for 11th Asia Pacific Conference for Exercise & Sports Science (APCESS)-Kuching, Sarawak, and Assistant Secretary General for 10th APCESS-Kaifeng, China. She is the only Singaporean who recently won first place in the prestigious Young Investigators Award (YIA) at the 14th Asia Conference on Kinesiology & Sports Science (ACKSS), International Conference on Movement, Health and Exercise (MoHE) 2024. She has also won best oral presentation presentations at the Asia Association Sport Management conferences (2022-2023). Moreover, she is also an IAAF Youth level 1 certified coach and coaches voluntarily. She has also often gone beyond her time to help coach many young children and motivate their interest in running. She has also conducted workshops, developed videos and CDs on running tactics and prevention of injuries from running. She has also worked on the Brain Breaks study in Singapore and is helping local schools to make it the UNSGD lab of the future.

The Effects of Dark Chocolate on Anaerobic Performance and other Physiological Measures Among Healthy Females and Males

Ng Yew Cheo, Govindasamy Balasekaran
Nanyang Technological University, Singapore

Dark chocolate (DC) can positively affect the cardiovascular system through its biologically active methylxanthines components (catechins, procyanidins, theobromine, (-)-epicatechin)) found in cocoa. Twenty healthy participants (males: age: 23.8 ± 1.21 yrs; height: 174.51 ± 5.78 cm; weight: 73.91 ± 9.18 kg; body mass index (BMI): 24.18 ± 2.21 $kg \cdot m^{-2}$; body fat percent (BF%): 19.18 ± 6.17 %; lean muscle mass percentage: 77.95 ± 6.16 %; females: age: 26.33 ± 4.95 yrs; height: 160.69 ± 5.52 cm; weight: 55.72 ± 7.03 kg; BMI: 21.51 ± 2.02 $kg \cdot m^{-2}$; BF%: 27.24 ± 3.74 %; lean muscle mass percentage: 69.20 ± 3.70 %)) and completed 2 trials – DC and white chocolate (WC) . Participants completed a Running Anaerobic Sprint Test (RAST, 35m x 6 sprints) with rate of perceived exertion (RPE) and heart rate (HR) recorded after 2nd, 4th and 6th sprint. They rested for 4 minutes and continued 2nd RAST. Paired t-test revealed significant differences between trials for 2nd RAST average timings (DC 2nd RAST: 6.43 ± 0.97 s vs WC 2nd RAST: 6.62 ± 1.05 s, p = 0.012); 2nd RAST total effort time (DC 2nd RAST: 38.58 ± 5.82 s vs WC 2nd RAST: 39.72 ± 6.28 s, p = 0.012); within trials for HR (DC 1st RAST HR 6th set: 168.75 ± 7.23 $beats \cdot min^{-1}$ vs DC 2nd RAST HR 6th set: 176.60 ± 7.72 $beats \cdot min^{-1}$, p = 0.000; WC 1st RAST HR 6th set: 170.15 ± 9.18 $beats \cdot min^{-1}$ vs WC 2nd RAST HR 6th set: 173.50 ± 7.92 $beats \cdot min^{-1}$, p = 0.010). Results indicated that DC supplementation significantly improved anaerobic sprint timings. Elite athletes, sports practitioners and coaches may consider implementing DC prior to training workouts and competitions to enhance sporting performance.

Dr. Mottakin Ahmed
GCHFL [Global Community Health (GCH) Future Leader (FL)]
Sports Officer, Government College Raisen, MP, India

Dr. Mottakin Ahmed is currently working as a Sports officer at Government College Silwani, Madhya Pradesh, India. He completed a Bachelor of Physical Education, Master of Physical Education, and PhD from Lakshmibai National Institute of Physical Education Gwalior, India. His research is focused on Physical education, Sports Biomechanics, and Health education. He presented research papers at many National and International conferences. The most recent was the International Conference of Exercise Physiology and Nutrition for Enhancing Health, Tamilnadu, India 2019 where he received the best research paper award. Dr. Mottakin Ahmed received the SAS International Conference Award from the Scholars Academic and Scientific Society 2019. He also received the Maulana Azad National Fellowship in 2019 for a PhD. He also attended many national and international webinars on physical education and sports science. He also wrote many research articles which are published in National and International journals. Recently he published a book-“Joint Analysis of Drop Shot of Badminton among Different Levels of Players: A Perspective Sports Education”. As a player, Dr. Mottakin Ahmed participated in many Badminton tournaments. He represented the university team in Badminton and Kabaddi. He participated in the 61st Senior National Ball Badminton Championship 2016, Telangana India. He officiated in Many Badminton tournaments. As a Sports Officer Dr. Mottakin Ahmed has been working with a different group of people mostly the children of youth of his society, he is dealing with physical education, recreational games, and sports. Recently a book was published: “Joint Analysis Drop Shot of Badminton among Different Levels of Players –A Perspective of Sports Education”. Since October 2020, he has represented India as a member of the Future

Leader/volunteer (FLV) program. As a FL, Mottakin has attended congresses in Jakarta- 6th ICPESS/ 2021, and India- 3rd BRICSCESS/ 2024.

Implementation of Physical education and sports in Bhopal division Madhya Pradesh colleges in terms of the New Education Policy of India(2020)

Mottakin Ahmed
Government college Silwani, Raisen MP

“Great things happen through a series of small steps” which is why sports is much more important for youth. Participating in sports teaches life-long lessons that teach hard work, and group cohesion by working together towards a common goal. There are social benefits when kids play sports, and create new friendships, taking part in sports also gives mental benefits by decreasing anxiety, and depression and improving esteem, by participating in sports children develop confidence, learn time management, and responsibility, and develop leadership qualities. India has a population of about 1.42 billion. still, India is lacking in health and fitness and sports there might be a reason that somehow India is lacking in the implementation of sports in schools, colleges, and universities. Considering all the factors, the research aims to investigate whether there is a need for sports and physical education in colleges of Madhya Pradesh India as the new education policy 2020 is implemented in all the colleges there is a high chance to implement it which will give new dimension toward health and fitness in India. The study aims to Implement Physical education and sports in the Bhopal division of Madhya Pradesh colleges in terms of the New Education Policy of India(2020). Near about 500 college-going students will be selected from the colleges of Bhopal. region Madhya Pradesh. A self-made questionnaire which will be validated by three universities will be given to students in English and local languages, A Chi-square test will be used for the study.

Ksenia Alekseeva
GCH Future Leader (GCHFL)
Chair of Theoretical and Methodological Grounds of Physical Education and Sports
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Russia

Ksenia Alekseeva is in her second year of a master's theory of physical culture and technology of physical education program, holds a bachelor's degree as an artistic gymnastics specialist and also works as a coach. She conducts her scientific research under the guidance of her supervisor Ph.D. Viktor A. Parakhin in the field of biomechanics, technical athlete’s training and human performance as well as physical education. Currently, together they are investigating the issue of artistic gymnastics position and development in Russian student sports (as a direction of mass sports). Since 2023 Alekseeva is a part of FLV program. She collaborates with Dr. Zornitza Mladenova (Global Community Health Senior Future Leader / Volunteer (FLV) CO Founder & CEO Global Diplomatic Magazine) and writes articles for Global Diplomatic Magazine. Since March 2024 she began to collaborate with Prof. Yulia Gushchina (Peoples’ Friendship University of Russia «RUDN University»,

Vice-President BRICSCESS Founding Member BRICSCESS) with whom they plan to study the problem of ensuring the anti-doping movement and adaptive sports in mass and youth sports.

Artistic Gymnastics in Russian Student Sports: Search for Solutions and Prospects for Development

The additional education system development in the field of PE and sports is currently associated with the need to preserve and strengthen the health of the population by appropriate means. Student mass sports - one of the Russian state youth policy priorities and an important component of the national teams reserve formation. On April 19, 2024, at the International Exhibition-Forum "Russia", a strategic session "Priorities for the student sports development in the Russian Federation until 2030" was held, where has been stressed the importance for a coordinated and integrated approach involving stakeholders: universities, industry colleges, sports federations and public organizations by building the communication and interdepartmental cooperative interaction at the regional level with public regulators and authorities. And in 2025, an updated intersectoral program for the student sports development will start, including events aimed at supporting and promoting student sports clubs and leagues, as well as competitions for student teams. The article will consider the artistic gymnastics position in the Russian student sports system: by describing the interaction mechanisms between university, gymnastics sports associations, the Russian Student Sports Union, the Ministries of Sports, Science, Higher Education and the Russian Gymnastics Federation, outlining the current competition system (Moscow Student Sports Games, the All-Russian Student Sports Festival). Also by generalizing successful experiences and solutions from other countries («NCAA Women's Gymnastics» in USA, «Deutsche Turnliga» in Germany, «Serie A Nationale» in Italy, Japan, China), the potential options for communication building between PE and sports subjects for the artistic gymnastics, popularization and development among Russian students, and the possibilities of gymnastics inclusion in the upcoming All-Russian and International Summer University Games will be proposed.

Nabilah Ebrahim
Biokinetics Clinical Supervisor
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Nabilah Ebrahim holds a degree in Sport Science, dual Honours in Sport and Exercise Science and Biokinetics. She completed her Masters in Biokinetics, with thesis titled “The determinants of falls among the elderly living in long-term care facilities in the City of Cape Town” which has heightened her passion for disabilities and interest in geriatrics. Nabilah was nominated as an ambassador for the Africa Wetu Foundation (AWF) and formed part of the UWC Emerging Leader’s Programme (ELP) whilst completing her masters. Nabilah formed part of The Foundation for Global Community Health Future Leaders (GCHFL) in March 2024 at the 3rd BRICSCESS held in Delhi NCR, India. As an athlete, Nabilah is a South African Region South and USSA (University Sport South Africa) karate gold medalist. She played university (Stellenbosch and UWC) hockey and had a role as the sport and conditioning coach. Nabilah is now pursuing her doctoral studies in motor and cognitive functions amongst the elderly. She is working as a clinical supervisor for the postgraduate students at the

University of the Western Cape. Her area of interest is geriatrics with a focus on biomechanics and rehabilitation. With her passion for geriatrics, she wishes to support and evolve the studies of holistic health and advanced motion capture systems amongst this high priority community.

The effect of exergaming on motor and cognitive functions among older adults living in long term care facilities in South Africa.

Performing daily activities requires balance for older adults. Age-related declines in balance, however, increase the risk of falls and severe injuries, such as fractured bones and head injuries. In older adults, exercise games (exergames) have been widely used to improve health-related outcomes. Exergaming is a combination of virtual gaming and exercising. Regular exercise can strengthen lower limb muscles, improve flexibility, and counteract age-related declines in neuromotor and somatosensory functions. Many studies regarding exergaming have shown to improve balance, especially among the elderly. Although falls are multifactorial in nature, impaired balance has been identified as one of the four main intrinsic risk factors for falls. Regular exercise can strengthen lower limb muscles, improve flexibility, and counteract age-related declines in neuromotor and somatosensory functions. The SMARTfit (https://smartfitinc.com/) is a novel technology that provides an opportunity to combine physical training with cognitive training. SMARTfit technology focuses on providing a multi-sensory approach for exercise by simultaneously using visual and auditory stimuli/feedback while delivering physical and cognitive training games. It can be utilized as a model to investigate the benefits of combining cognitive challenges with physical training on elderly individuals. The study will make use of the SMARTfit device to assess the effectiveness of virtual gaming-based exercise program aimed at improving and or maintaining the balance performance among the older adults in long term facilities in South Africa.

Mr. Tholumusa Favoured Mlalazi
GCH Future Leader (GCHFL)
Researcher, Active Healthy Kids, Zimbabwe
Past Director of the All-Africa Choir in Cuba
Spanish Instructor - Alliance Francaise, Bulawayo
Support Worker, Silver Birch Care, United Kingdom
Former Skills Builder Lead, Aylesbury UTC, United Kingdom
Zimbabwe

Tholumusa Favoured Mlalazi, AKA "Tholu," is a Support Worker mainly for unaccompanied youth migrants at Silver Birch Care. Although based in the UK, Tholu is part of the Active Healthy Kids Zimbabwe Working Group that pioneered and produced the Zimbabwe Report Cards on Physical Activity since 2016. A committed Global Community Health Future Leader (GCHFL) with The Foundation for Global Community Health (GCH) and the founder of a walking-based community initiative aptly called "Walk for Life - BYO" in Zimbabwe, Tholu enjoys problem-solving community research and envisions the resolution of the United Nations Sustainable Development Goals (SDGs). He has shared some of his work at conferences such as The First World Congress of Future Leader Volunteers (WCFLV) in South Africa in 2019, The Inaugural BRICS Council for Exercise and Sports Science (BRICSSESS 2017) in Brazil, The 4th Global Forum for Physical Education Pedagogy GoFPEP 2016 in Turkey, and The International Conference on Physical Education & Sports Science ICPESS 2015 in Indonesia. He also served as a Core Subjects Intervention teacher at Buckinghamshire University Technical College (UK) where he led the Skills Builder Programme, which nurtures key competencies for professional success in young learners. His other areas of interest include Sports Injury Management through graded exercise, Kinanthropometry, and Topical issues like Technology in teaching Physical Education. Tholu

graduated with a Licentiate in Physical Education and Sports, Post Graduate Certificates in Biological Fundamentals of Health Promotion in Physical Education and Sports, and Therapeutic Massage from Escuela Internacional de Educación Física Y Deportes (EIEFD la Habana, Cuba). He has been consolidating his experiences for community benefits and is a practising ISAK Certified Full-Profile Technician, competent in testing the physical-physiologic qualities of different populations, particularly children. This is one of his priorities as a member of the GHC. Tholu is also a Seventh-Day Adventist Christian.

BODY COMPOSITION AND SOMATOTYPES OF ELITE COLLEGIATE KARATE PRACTITIONERS IN ZIMBABWE

MLALAZI Tholumusa Favoured[1], NDLOVU Sipho Hobane[2], GOCHERA Simbarashe[3]

1. Active Healthy Kids Zimbabwe
2. Newcastle University, United Kingdom
3. Sports and Recreation Commission, Zimbabwe

Research on anthropometric characteristics of sportspersons in Zimbabwe is steadily gaining traction. This study aimed to determine the body composition parameters and assess the somatotypes of elite collegiate karate practitioners in Zimbabwe. Seventeen subjects (11 male, 22.22 ± 1.04 years, and 6 females, 21.98 ± 1.92 years), were evaluated at an inter-tertiary tournament. Anthropometric variables were measured using protocols of the International Society for the Advancement of Kinanthropometry (ISAK). Eight skinfolds (triceps, subscapular, biceps, suprailiac, supraspinale, abdominal, thigh and calf), four girths (arm [flexed-tensed], waist minimum, gluteal [hips] and the calf) and two breadths (femur and humerus) were measured. Body Mass Index (BMI), Waist-to-Hip Ratio (WHR), percentage body fat (%BF), fat mass (FM) and fat-free mass (FFM) were calculated as body composition variables. The Heath-Carter method was used to assess somatotypes. Males presented mean body mass (64.76±7.92 kg), stretch stature (174.03±8.67 cm), %BF (10.92±3.66 %), BMI (21.36± 1.71 $kg \cdot m^{-2}$), FM (7.17±2.84 kg), FFM (57.60±6.56 kg), WHR (0.83±0.38), Sum of 8 skinfolds (59.96 ± 20.61 mm), sum of 4 girths (222.53±10.85 cm). Females had mean body mass (56.52±5.65 kg), stretch stature (159.10±4.71 cm), %BF (19.92±2.57 %), BMI (22.35±2.30 $kg \cdot m^{-2}$), FM (11.34±2.35 kg), FFM (45.18±3.72 kg), WHR (0.69±0.03), Sum of 8 skinfolds (132.08±17.29 mm), sum of 4 girths (222.13±12.50 cm). Males were 1.9-4.5-3.2 (ectomorphic mesomorph) and females 4.5-4.2-1.9 (mesomorphic endomorph). The karatekas were lighter, shorter and with a lower %BF. Coaches and athletes are encouraged to complement training with optimal nutrition. Future studies could examine body composition and somatotype in different competition categories.

DR. NAMITA SARANG, Ph.D.
Future Leader (FL)
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Dr. Namita R. Sarang is an accomplished academic and fitness professional specializing in Fitness, Physical Education and Sports with extensive experience in promoting health and wellness across educational and corporate sectors. She holds a Ph.D. from Rayalseema University and a Postgraduate Diploma qualification in Fitness Management. Currently heading an Exclusive Women Wellness centre, she has served as Assistant Director of Physical Education and Sports at Visvesvaraya Technological University (VTU), Belagavi, Karnataka, India. She has also worked as a

Fitness Expert for NET APP and I2 Software Companies and leads Namita's Femme Fitness and Wellness Studio in Dharwad, Karnataka, India. Her certifications include National Eligibility Test (NET), State Lecturer Eligibility Test (SLET), and multiple national fitness training accreditations in functional fitness, group fitness and personal training, special population fitness, strength conditioning, and nutrition. A decorated National athlete, she has represented Karnatak University and Karnataka State in weightlifting and athletics, securing numerous medals. Dr. Sarang is a State Award Winner of the Women Leadership Award by CMO Asia (2020) and recipient of the Prerana Award by Rotary Club, Kumta, Karnataka, India. She has authored and co-authored several books and research publications on women's health, fitness, and sports. Her leadership extends to organizing national-level sports events, fitness workshops, and community welfare programs under NSS and Youth Red Cross. As a member of several professional bodies like NAPESS, PEFI, and DAAUK, Dr. Sarang exemplifies dedication to fitness education, women's empowerment, and community well-being. As a member of the GCH FL Program she is attending her first international conference at APCESS-2025 to gain knowledge and experience from esteemed learned Professionals, SYL and FL.

Empowering Collegiate Girls through Aerobics: A Pathway to Fitness and Holistic Wellness.

Dr. Namita R Sarang. Dharwad Karnataka, India.

Aerobics is a dynamic and engaging form of exercise that offers substantial benefits across both physical fitness and overall wellness. By integrating rhythmic movements with music, aerobics stimulates cardiovascular endurance, enhances muscular strength and flexibility, and improves coordination and balance. Regular participation in aerobics helps individuals develop greater stamina, muscle tone, and an increased range of motion, contributing to a more resilient and capable body. Beyond its physical advantages, aerobics also plays a crucial role in nurturing psychological and emotional well-being. The energetic and rhythmic nature of aerobics promotes the release of endorphins, which can reduce stress, alleviate anxiety, and elevate mood. Participants often report feeling more energized, emotionally balanced, and socially connected as the group environment encourages motivation, positive interaction, and support. The holistic impact of aerobics extends beyond mere exercise routines. It fosters healthy lifestyle habits by making physical activity enjoyable and sustainable. This enjoyable approach helps individuals to embrace regular movement as a fundamental part of their daily lives, encouraging long-term commitment to health and wellness. In essence, aerobics serves as a comprehensive wellness tool that nurtures the body, mind, and spirit. Through its combination of physical exertion and social engagement, it supports the cultivation of balanced, healthy individuals who are empowered to maintain an active and vibrant lifestyle. Incorporating aerobics into one's routine can help create a foundation for enduring physical health and emotional wellness.

Jingning Yang
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Jingning Yang is a PhD student at the School of Physical Education and Sports, Soochow University, China. In 2019, she received a bachelor's degree in economics from Wuhan Sport University, where she joined the student Union. In 2023, she received her master's degree from Soochow University. At present, her main research direction is sports industry and economy, mainly studying the relationship between sports industry and economic development, and evaluating it with economic models. Since joining the FL program in 2021, under the leadership of Professor Ming Kai Chin, she has attended two APCESS conferences and gained growth and progress in each meeting. During the period of master and doctor, she participated in many domestic and foreign academic conferences and gave oral reports, participated in national research projects, published many papers, and won the national scholarship and the title of outstanding graduate student. At the same time, she also participated in the volunteer service of many competitions and had a deeper understanding of sports events and national fitness. Joining the government as an intern gave her a more comprehensive understanding of the sports industry. In 2023, she participated in the construction of a model school in China, and in 2024, she gave a speech at the opening ceremony of new students as a representative of senior students.

A Study on Spatial and Temporal Differentiation and Convergence of Regional Sports Industry Development Levels

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The imbalance and local challenges of inter-regional sports industry development are increasingly prominent, and it is of great significance to deeply analyse the spatial and temporal distribution differences in the development level of sports industry in each region and its convergence mechanism. Based on the 2015-2022 Chinese provincial panel data, the dynamic evolution of the spatial pattern of sports industry development is visualised by ArcGIS, and the spatial differences in the development level and the sources are analysed with the help of Dagum's Gini coefficient. Meanwhile, by combining the σ-convergence and β-convergence models, the study systematically explores the convergence status of the development of the sports industry in the whole country and the three major regions of the east, middle and west. The results of the study show that the development level of the sports industry in the whole country and the regions is characterised by a significant geographical gradient distribution, with the east leading and the central and western regions lagging. During the observation period, the total regional gap in the development of the national sports industry shows a fluctuating trend. Further analyses show that there is σ-convergence at the national level and within the eastern, central and western regions. As for β-convergence, except for the eastern region, which exhibits spatial conditional β-convergence characteristics, the whole country and the central and western regions show the trend of absolute β-convergence and conditional β-convergence. The study provides a reference for formulating differentiated sports industry development strategies and promoting the coordinated development of sports industry among regions.

Gao Yu
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Gao Yu is a postgraduate student at the School of Physical Education, Henan University. He graduated from the School of Physical Education, Henan University, majoring in sports dance. His research interests are physical education curriculum reform and youth sports. In terms of scientific research, under the guidance of his mentor, he published an article in the 13th National Sports Science Conference as the first author, which was highly praised by peer experts. In terms of study, he was awarded the Merit student of Henan University, the outstanding undergraduate graduate of Henan University, the graduate scholarship of Henan University, and the outstanding graduate student of Henan University. In terms of sports competitions, he participated in the 2021 Dancesport Network Grand Prix and won the champion, participated in the 2021 China Dancesport Open College students Professional Group A, and participated in the 2023 China Dancesport Open Series (Wuxi Station) and won the first place in Group B of college students. In addition, he served as a dancesport examiner and dancesport judge. He also joined Global Community Health Foundation (GCH) as a Future Leader Volunteer under Prof. Dr. Zhou and Prof. Ming Kai's mentorship. He is convinced that excellent results are not only an affirmation of past efforts, but also a solid foundation for future research.

Teaching design and practice of large unit of physical education and health course pointing to core accomplishment

With the exploration of the theory and practice of curriculum reform, large unit teaching has gradually become the focus of attention. Through the integrated, project-oriented, structured and contextualized teaching design, the large unit teaching of physical education and health course breaks the barriers of traditional teaching and provides abundant soil for the development of the overall education mode and training model. However, how to achieve the structure of teaching objectives, teaching content, teaching process and other elements to match the core literacy goals? How to promote the first-line PE teachers to better understand and effectively promote the teaching practice in the form of large units? How to help students experience the fun of sports and promote efficient and lasting learning? For physical education teaching practice, it is the bottleneck to be broken through. According to the research, the following approaches should be taken in the large unit teaching based on literacy: (1) Make the teaching theme clear, and determine the large unit theme with the big concept as the control center; (2) Grasp the teaching direction and determine the key concepts based on the learning objectives of large units; (3) Create a real situation, focus on key concepts to determine the learning tasks of large units; (4) Adhering to the system principle, based on task groups to connect large unit class design; (5) Docking core qualities and creating large unit evaluation activities in real situations.

Ei Thandar Win
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The Foundation for Global Community Health (GCH) Future Leader
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Ei Thandar Win is currently studying master's degree at the School of Physical Education, Henan University in China majoring in Sports Economics and Management. She also works as an assistant director in the sports and physical education department under the Ministry of Sports and Youth Affairs, Republic of the Union of Myanmar (https://mosya.gov.mm/). Since 2019 she has also served as a focal point person from Myanmar for the ASEAN Senior Official Meeting on Sports (SOMS) and the ASEAN Ministers Meeting on Sports (AMMS), both of which are sectoral bodies under the ASEAN Social-Cultural Community (ASCC). She firmly believes that collaboration with a team is the key to accomplishing success in any endeavor. Her passion lies in assisting others, especially when it comes to educating children, and she has consistently been engaged in philanthropic activities. She is interested in and loves playing traditional Myanmar sports and capacity-building processes for the new generation of youth. Although her educational background is in Computer Science, she loves her current job and is eager to expand her knowledge and network. She is passionate about studying in the field of sports, she participated in numerous capacity training programs, communication courses, international workshops, seminars, and ASEAN meetings related to sports. She is honored to be chosen as one of the Youth Future Leaders (FLV) representing Myanmar at various global events that promote holistic physical activity and physical education.

Empowering Youth for Active Ageing Awareness through Physical Fitness Activities: The Myanmar Perspective

With Myanmar's population aging, it is imperative to develop inclusive, health-oriented programs that address generational disparities. This initiative seeks to tackle these challenges by uniting younger and older generations in physical fitness activities, particularly focusing on dancing, which is culturally significant and physically advantageous. The initiative integrates physical fitness dancing, establishing an enjoyable platform for youth to comprehend the importance of sustaining physical health as they mature, while elderly participants gain from the physical activity and social interaction offered by the engagement. This project seeks to foster mutual respect and understanding among generations, enhancing empathy and a collective feeling of community. The concept entails the organization of monthly physical fitness programs at community centers, pairing young with senior adults for engagement. These exercises will be crafted to enhance physical fitness while fostering communication and understanding across generations. The findings of this study are expected to exert a substantial favorable influence on both the youth and senior participants. To educate the youth about active aging and to foster a positive perception of the aging process, emphasizing that maintaining activity and social engagement can improve the quality of life in later years. Senior participants also had advantages from the physical activity, which enhanced their mobility, balance, and overall fitness. The program's social interaction alleviated emotions of loneliness and isolation frequently encountered by elderly persons in Myanmar. This study highlights the capacity of cultural and physical activities to enhance community cohesiveness and strengthen intergenerational relationships, so promoting a more inclusive approach to aging in Myanmar. It underscores the

advantages of intergenerational activities in improving physical health, and fostering social connections across generations.

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Xiangling Zhang is a postgraduate student at Shanghai University of Sport, with her research direction in physical education teaching. She holds a bachelor's degree in dance from Shangrao Normal University. During her undergraduate and postgraduate studies, Xiangling participated in various dancesport competitions and achieved excellent results. For example, she has achieved such rankings as: runner-up in the Amateur New Star Group at the 2019 CBDF National Championship (Suzhou Station); 4th place in the Rookie Latin Group at the 33rd CBDF National Championship of International Standard Dance in 2019; 3rd place in the College/University Group A Latin at the 2020 CBDF China Cup International Standard Dance Tour (Hangzhou Station); and 5th place in the College Group A Latin at the 2020 CBDF National Finals. In September 2023, Xiangling was admitted to Shanghai University of Sport to pursue a master's degree. Under the guidance of her supervisor, she actively participated in a series of academic conferences and presented papers.

A Study on the Practical Path of Situation Creation in Large-Unit Teaching of the Physical Education and Health Curriculum

This study examines the practical pathways for creating effective learning situations within large-unit teaching of the Physical Education and Health curriculum. It emphasizes that meaningful learning situations are crucial for generating knowledge, developing skills, and fostering student interest. However, traditional teaching often separates knowledge and skills from learners, as well as from their production and application contexts, which leads to mechanical and superficial learning. To address this issue, the study proposes three practical approaches. First, it prioritizes students' active participation in the learning of sports and health knowledge, where bodily perception and hands-on practice promote cognitive growth, cooperation, and self-awareness. Second, it highlights the integration of knowledge and skills with their production contexts, enabling students to extract core meanings, reorganize learning steps, and achieve deeper mastery. Third, it emphasizes the connection between knowledge, skills, and application contexts by situating learning in dynamic, meaningful environments, where students construct significance through cognition, interaction, and collaboration. From a future-oriented perspective, the study argues that fostering interaction among students, knowledge, and contexts offers an effective pathway for optimizing large-unit teaching and enhancing the overall quality of Physical Education and Health.

#2. The effects of physical activity on pro-social behaviour among university students: the chain mediating role of life satisfaction and perceived social support

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Purpose: To investigate the relationship between physical activity and pro-social behaviour of university students and the mediating role of life satisfaction and perceived social support in between. **Methods:** The Life Satisfaction Scale, Pro-Social Behaviour Scale, Comprehending Social Support Questionnaire and Physical Activity Scale were used to survey 540 university students. Descriptive analysis, reliability analysis, Pearson correlation analysis, Harman's single-factor test, and Bootstrap analysis were conducted using SPSS 26.0. **Results:** (1) Physical activity predicted pro-social behaviour. (2) Physical activity was significantly correlated with comprehending social support, as well as life satisfaction. Appreciating social support positively predicted pro-social behaviour and life happiness. Pro-social behaviour was positively associated with life satisfaction.(2) Life satisfaction and perceived social support mediated significantly between physical activity and pro-social behaviour. The mediating effect consisted of three paths: physical activity → life satisfaction → pro-social behaviour, physical activity → comprehension of social support → pro-social behaviour, and physical activity → life satisfaction → comprehension of social support → pro-social behaviour. **Conclusion:** (1) Physical activity significantly and positively predicted college students‘ life satisfaction, perceived social support, and pro-social behaviour, implying that physical activity may contribute to the enhancement of college students’ life satisfaction and perceived social support, and to the improvement of college students' pro-social behaviour;(2) Physical activity not only directly affects pro-social behaviour, but also indirectly affects pro-social behaviour through the separate mediating roles of life satisfaction and perceived social support, as well as the chain mediating roles of the two, which further explains the reasons for the role of physical activity in pro-social behaviour of university students, and was of great significance to the enhancement of and intervention in pro-social behaviour of university students.
Keywords: social behaviour, mental health, college students

#3. The Relationship Between College Students’ Physical Exercise and Subjective Well-Being: A Chain Mediation Effect Based on Mindfulness and Emotion Regulation

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Purpose: To explore the pathways through which physical exercise promotes subjective well-being among college students, and to build a chain mediation model including physical exercise, subjective well-being, mindfulness, and emotion regulation. The interactions and influence paths among the variables were verified to gain a deeper understanding of the internal mechanism of physical exercise on subjective well-being among college students. **Methods:** Using stratified cluster sampling,701 college students from 11 universities in China were surveyed using a questionnaire. The core variables were measured using the Physical Exercise Scale, the Subjective Well-being Scale, the Mindful Attention Awareness Scale, and the Emotion Regulation Questionnaire. SPSS 26.0 was used to analyze the data, which included Pearson correlation analysis, structural equation model testing, and the bias-corrected percentile bootstrap method. **Results:** (1)Physical exercise is positively correlated with subjective well-being, but the direct effect of physical exercise on subjective well-being was not significant;(2) physical exercise is positively correlated with mindfulness; mindfulness is positively correlated with emotion regulation; emotion regulation is positively correlated with

subjective well-being; physical exercise is positively correlated with emotion regulation; Mindfulness is positively correlated with subjective well-being.(3) mindfulness and emotion regulation had significant mediating effects between physical exercise and subjective well-being. The mediating effect was composed of three paths: physical exercise → mindfulness → subjective well-being, physical exercise → emotion regulation → subjective well-being, and physical exercise → mindfulness → emotion regulation → subjective well-being. **Conclusion:** Exercise was negatively correlated with subjective well-being among college students, while mindfulness and emotion regulation were positively correlated. Mindfulness had an independent mediating effect between exercise and subjective well-being. Emotion regulation also had an independent mediating effect between exercise and subjective well-being. Mindfulness and emotion regulation had a chain mediating effect between exercise and subjective well-being.
Keywords: college students, physical activity, student well-being

#6. Exercise Therapy Efficacy for Adolescent Idiopathic Scoliosis: A Network Meta-Analysis on Cobb's Angle Reduction

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To investigate the optimal exercise modality for Cobb angle reduction in adolescent idiopathic scoliosis (AIS) through a network meta-analysis comparing nine therapeutic approaches. **Methods:** A systematic search was conducted across PubMed, EMBASE, MEDLINE, and Web of Science (2000-2025) to identify randomised controlled trials (RCTs) evaluating exercise therapies in AIS patients (Cobb 10°-45°). Two independent investigators performed study selection and data extraction using Covidence. Treatment effects were quantified by weighted mean differences (WMD) with 95% credible intervals (CrI), analysed through frequentist NMA in STATA 17.0 with random-effects model. The Cochrane Risk of Bias 2.0 and CINeMA framework were utilised to assess the certainty of evidence. **Results:** Based on the effectiveness in reducing the Cobb angle in AIS, the ranking of exercise therapies was as follows: suspension technique combined with medical gymnastics (SUCRA = 89.2) > suspension training (SUCRA = 78.1) > muscle strength training (SUCRA = 71.5) > medical gymnastics (SUCRA = 59.2) > SEEA training (SUCRA = 44.1) > balance function training (SUCRA = 36.6) > physical therapy prescription (SUCRA = 30.8) > muscle stretching technique (SUCRA = 27.1) > conventional therapy (SUCRA = 13.5). **Conclusion:** All nine exercise therapies demonstrated efficacy in reducing the Cobb angle in AIS. The suspension technique combined with medical gymnastics showed the most significant improvement, providing Class IIa evidence for clinical guidelines. Further large-scale, high-quality studies are needed to validate these findings and to optimise treatment selection based on individual patient conditions.
Keywords: Exercise Therapy; Adolescent Idiopathic Scoliosis; Network Meta-Analysis

#11. Bibliometric Analysis of Sport Psychology in Athletes Using CiteSpace and VOSviewer: Evolution, Trends, and Hotspots

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Sports psychology has developed into a distinct discipline over the last two centuries, focusing on the psychological factors that affect athletic performance. Recent advancements in sports science, particularly in the areas of training, competition, and recovery, underscore the importance of psychological principles in enhancing performance outcomes among professional athletes. **Purpose:** The objective of this research is to conduct a comprehensive bibliometric analysis of sports psychology literature from the past decade, using CiteSpace and VOSviewer, to identify current research trends and hotspots, as well as to forecast future research directions. **Methods:** This study examined multiple dimensions of the sports psychology field, focusing on publication patterns, institutional contributions, and thematic shifts. A total of 5,507 articles were retrieved from the Web of Science (WOS) database for analysis. Microsoft Office Excel was employed for the preliminary data integration. Bibliometric analysis was conducted using CiteSpace and VOSviewer. **Results:** According to the literature data extracted from the core collection of the Web of Science database, from 2014 to 2024, research in the field of athletes' sports psychology has exhibited a significant growth trend. In terms of international collaboration, the countries with the highest total link strength are England (1,076 link strength), the USA (946 link strength), Canada (779 link strength), Australia (752 link strength), and Germany (437 link strength). Total link strength serves as a measure of the degree of collaboration and connectivity between nations, reflecting a robust network of international cooperation. Furthermore, research hotspots have increasingly focused on mental health, depressive symptoms, sleep disorders, and eating disorders. **Conclusion:** This bibliometric study highlighted the evolving landscape of sports psychology research and establishes a framework for future studies to enhance the understanding of psychological factors influencing athletic performance.
Keywords: Sport Psychology, athletes performance, bibliometric analysis

#12. Investigating the Attention Types and Quality Characteristics of Volleyball Referees in China

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Modern volleyball required referees to maintain high attention quality for swift decision-making. **Purpose:** The primary aim of this quantitative study was to investigate the types and qualities of attention among Chinese volleyball referees, assessing the development of these attributes across various demographic factors. **Method:** This study is based on the use of the Attention and Interpersonal Behavior Type Test Scale (TAIS test). The six subscales in the scale reflected the types of attention concentration, and each subscale has two questions for referees to do self-assessment. In addition, the attention quality measurement used the Yin Hengchan Attention Test Scale to evaluate the four dimensions of volleyball referees' attention quality. The two scales assessed the attention types of 130 volleyball referees in Henan Province. The data obtained after the measurement were entered, and the data were underwent descriptive statistical analysis, one-way analysis of variance, LSD multiple comparisons, and Pearson correlation analysis using SPSS 27.0. **Results:** That the overall attention characteristics of Chinese volleyball referees included broad external attention, broad internal attention, and concentrated attention. Physiological conditions emerged as the primary influence on attention type, while environmental factors had a minimal impact. Significant differences in broad external attention (BET), organizational external attention (OET), and narrow attention resources (NAR) were identified among referees of varying levels, while no notable gender differences were found. Age and years of refereeing influenced BET and OET. Additionally, gender, refereeing levels, age, and experience were linked to differences in attention allocation, breadth, stability, and transfer. **Conclusion:** This study demonstrated the characteristics and interrelations between attention types and qualities among Chinese volleyball referees, providing

insights for enhancing attention and judgment capabilities. It offered valuable references for the psychological selection and training of referees, contributing to the development of the officiating team in Chinese volleyball.
Keywords: volleyball referee, attention type, attention quality, demographic factors, decision-making

#15. A Theoretical Analysis of Taijiquan Resistance Training Against Muscle Atrophy in Microgravity

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Skeletal muscle atrophy due to microgravity poses a significant medical challenge during long-term space missions and restricts advancements in manned space flight. This atrophy results from various mechanisms, including disrupted energy metabolism, protein metabolism, calcium ion homeostasis, and altered myostatin levels. Traditional methods used to counter muscle atrophy and bone loss, such as artificial gravity equipment and pneumatic resistance training, have limitations and risks. **Purpose:** This study aimed to investigate the mechanism of Taijiquan resistance training in promoting muscle activity and countering muscle atrophy in a microgravity environment. **Methods:** A theoretical analysis with narrative review approach was conducted using literature data to investigate the potential benefits of Taijiquan exercises for astronauts in combating muscle atrophy in microgravity conditions. **Results:** The results showed that regular Taijiquan practice primarily develops strength in the lower limb muscle groups. Resistance training using elastic bands could help delay strength decline by enhancing muscle strength. The analysis indicated a positive correlation between Taijiquan practice and its effectiveness in a microgravity environment. This is mainly because the resistance provided by elastic bands may further enhance the efficacy of Taijiquan in countering muscle atrophy by strengthening the antagonistic forces of working muscles. **Conclusion:** Taijiquan, combined with elastic band resistance training, may effectively promote muscle activity and counter atrophy in a microgravity environment. However, this study is limited to theoretical analysis and does not include empirical interventions in simulated microgravity environments.
Keywords: microgravity environment, muscle atrophy, Taijiquan resistance training

#16. Integrating AI Digital Technology and Blended Teaching to Enhance Sports Values in Physical Education

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Sport is a significant cultural phenomenon, yet the current physical education curriculum often overlooks sports values, resulting in limited teaching methods and weak value transmission. This reduces students' learning motivation and hinders deep engagement with the subject. Offline teaching alone is insufficient, but the rapid development of AI technology provides new solutions. **Purpose:** The purpose of this study is to solve the problem of the integration of sports values in traditional teaching. This paper attempts to evaluate the way of integrating sports values into blended teaching by exploring the mode, technical logic and demand dynamics of the combination of artificial intelligence digital technology and sports values blended teaching, through research, inject new teaching ideas into traditional teaching, improve teaching methods, and use multi-form and multi-

angle teaching methods to integrate sports values into physical education teaching, so as to improve students' sports values. **Method:** Employing qualitative evaluation methods, this research investigates the integration logic of "sports values" within teaching. It focuses on enhancing teaching design, diversifying methods, strengthening students' identification with sports values, and exploring complex teaching frameworks. **Results:** AI can improve students' learning pleasure and self-learning ability, and make up for the shortcomings of traditional teaching values and sports culture, The successful integration relies on understanding the cultural and spiritual significance of sports and its core values. Guided by AI digital universality theory, the internal framework of blended teaching is reinforced by external factors, including teaching methodologies, the influence of sports values, curriculum construction, and student emotional engagement. **Conclusion:** In an AI digital integration framework, the reciprocal influence of sports values is crucial for enhancing students' sense of sports identity, promoting physical activity, and fostering emotional communication. This interplay is vital in achieving lifelong engagement in sports.
Keywords: Sports values, AI digital technology, physical education

#21. Mental Health Challenges and Interventions for Medical Students: A Systematic Review

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Medical students face a high risk of mental health issues due to the rigorous demands of their academic and clinical training. The rising prevalence of anxiety, depression, and stress adversely affects their academic performance and future careers, highlighting the urgent need for targeted interventions to improve their mental well-being. **Purpose:** This systematic review aimed to evaluate the mental health status of medical students, identify influential factors, assess the effectiveness of existing interventions, and propose strategies for optimising psychological support. **Method:** A comprehensive literature search was conducted from 2000 to 2024 across databases including PubMed, Google Scholar, and Scopus. The review analysed both qualitative and quantitative studies regarding the mental health of medical students and relevant interventions to summarise the prevalence of psychological issues, contributing factors, and intervention strategies. **Results:** The review found that 25–40% of medical students experience psychological problems, predominantly anxiety (20–30%), depression (15–25%), and stress (30–40%). Significant contributing factors include academic pressures, internship challenges, and career uncertainties. Interventions are categorised into psychological (Cognitive Behavioural Therapy, Mindfulness-Based Stress Reduction), behavioural (exercise therapy), environmental (mental health education), and multi-modal strategies, all of which demonstrate effectiveness in alleviating symptoms of anxiety and depression. **Conclusion:** While interventions have shown improvements in mental health, their effectiveness varies by context. Multi-modal interventions are promising but require standardisation and long-term evaluation. Future research should consider individual-specific responses based on gender, academic level, and background. Immediate action is required to address mental health challenges among medical students. Tailored multi-modal approaches show potential, yet future strategies must focus on individualised methods and the long-term impact on students' well-being.
Keywords: medical students, mental health, psychological intervention, multi-modal strategies, anxiety

#26. Physical Education Engagement and Social Adaptation: The Mediating Role of Peer Relationships and Socio-Emotional Competence

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Purpose: This study examined the influence mechanism of physical education (PE) engagement on pupils' social adaptation to support their healthy growth and holistic development. **Methods:** Using a cross-sectional design, 1,000 questionnaires were distributed to primary school students in Guangdong Province, China, measuring PE engagement, social adaptation, peer relationships, and socio-emotional competence. After data cleaning, 894 valid responses were analyzed (52.8% male, 47.2% female). SPSS 26.0 was used for descriptive and correlation analyses. PROCESS macro Model 6 (Hayes) tested the chained mediation effects of peer relationships and socio-emotional competence while controlling for gender and age. **Results:** The Harman single-factor test indicated no significant common method bias (first factor variance = 24.64%). Significant positive correlations were found among PE engagement, peer relationships, socio-emotional competence, and social adaptation ($p < 0.01$). Mediation analysis showed PE engagement directly predicted social adaptation ($\beta = 0.111$, $p < 0.01$). Three indirect pathways were identified: (1) PE engagement → peer relationships → social adaptation; (2) PE engagement → socio-emotional competence → social adaptation; and (3) PE engagement → peer relationships → socio-emotional competence → social adaptation. All 95% Bootstrap CIs excluded zero, confirming significance. Mediating effects accounted for 9.47%, 16.57%, and 7.69% of the total effect, respectively. **Conclusions:** (1) PE engagement significantly enhances pupils' peer relationships, socio-emotional competence, and social adaptation. (2) Social adaptation is predicted both directly and indirectly by PE engagement through individual and chained mediation effects of peer relationships and socio-emotional competence. Strengthening PE engagement, along with social and emotional development, is vital for improving pupils' adaptability.
Keywords: Physical Education Engagement, Peer Relationships, Socio-Emotional Competence, Social Adaptation

#27. Research on Age-Friendly Renovation of Smart Fitness Services in Urban Communities in China

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Against the dual backdrop of accelerating global population aging and the flourishing digital-intelligent era, older adults often face challenges of being "trapped by technology" and "hesitant toward smart services. **Purpose:** Based on the "Value-Technology-Institution" analytical framework, this paper delves into the theoretical logic of age-friendly renovations for urban community smart fitness services. Through analyzing typical cases, it explores practical strategies to provide robust theoretical support and practical guidance. **Methods:** This paper uses logical analysis method, case analysis method and other research methods. **Results:** Research has found that, from a value perspective, a service system should be built with elderly well-being at its core, emphasizing both humanistic care and health equity. This involves deeply embedding the concept of proactive health, bridging the digital divide, and implementing tiered precision services. From a technological perspective, supported by intelligence, a technology platform should be developed that balances age-friendliness and inclusiveness. This includes integrating intelligent technological innovations, focusing on demand-oriented R&D, and establishing a scientific fitness guidance system. From an institutional perspective, collaborative governance should be the path forward, building a long-term mechanism that emphasizes both policy support and dynamic supervision. This involves improving the policy support system, establishing a dynamic regulatory framework, and creating a multi-faceted collaborative landscape. **Conclusion:** This paper analyzes the practice of age-friendly renovation of

smart fitness services in Chinese urban communities, the study constructs a tripartite governance system emphasizing value, technological, and institutional, effectively resolving the structural imbalance between technological and value rationality in current age-friendly renovations. Moving forward, deepening value-driven concepts, optimizing age-friendly technological ecosystems, and fostering standardized, sustainable smart fitness service systems will provide more practical samples for active aging.
Keywords: Community Smart Fitness Services, Age-Friendly Renovations, The Elderly

#32. Metaverse application for a P.E. dance class -System development-

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Purpose: Distance learning and inclusiveness have gained importance in education, including in physical education (P.E.). However, the physical and interactive nature of P.E. presents unique challenges for implementing these goals effectively. **Methods:** To address these issues, we developed a metaverse-based application that enables students to join dance classes remotely and inclusively. The application captures students' movements and maps them onto digital avatars in real time, allowing them to dance together in a shared virtual space. Teachers can control music, backgrounds, and camera views, creating an engaging learning environment. The system requires only smartphones or tablets, making it accessible and easy to use. It incorporates real-time databases, motion capture, retargeting, and metaverse servers to ensure smooth performance. Importantly, it empowers students with disabilities to participate without physical barriers, promoting equity. A pilot class was conducted in a high school with 11 students (5 male, 6 female), consisting of four 50-minute sessions. A questionnaire using a 0–10 scale was administered after the sessions to evaluate the learning experience. Table 1 shows all questionnaire items. **Results:** The overall mean score was 9.23 ± 0.36. The highest-rated item (9.75 ± 0.43) was "Help me to learn and develop basic skills of different physical and sport activities." The lowest score (8.42 ± 1.44) corresponded to "Schools have enough equipment for teaching physical activities with Metaverse technology." **Conclusion:** This pilot study showed that the metaverse-based application provided a highly satisfactory and inclusive learning experience. Students positively evaluated its educational value, though concerns about equipment availability remain. Future studies should involve more diverse participants and guide further system development based on feedback.
Keywords: Metaverse, Physical Education, Software Engineering

#35. A Systematic Review on High-Performance Training Programs for College Volleyball Players

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Purpose: The purpose of this systematic review is to evaluate and synthesize the existing literature on high-performance training programs designed for college-level volleyball players, focusing on their effectiveness in enhancing performance metrics such as strength, power, agility, endurance, and skill proficiency. **Methods:** A systematic search was conducted using electronic databases including PubMed, Scopus, Web of Science, and SPORTDiscus for studies published between January 2000 and December 2024. Keywords included "high-performance training," "college volleyball," "athletic performance," "strength training," and "sports conditioning." Inclusion criteria comprised peer-reviewed studies focusing on male and/or female collegiate volleyball players, interventions lasting a minimum of four weeks, and quantifiable performance outcomes. Data extraction and quality

assessment were performed using PRISMA guidelines and the PEDro scale. **Results:** A total of 27 studies met the inclusion criteria. The analysis revealed that high-performance training programs incorporating a combination of strength training, plyometrics, neuromuscular training, and sport-specific drills significantly improved vertical jump height (by an average of 10.3%), agility (average 7.5% improvement in T-test performance), muscular strength (notably in lower body and core), and game-specific skills such as spike and block efficiency. Periodization, individualized training loads, and integrated recovery strategies were highlighted as key components of effective programs. Notably, programs extending beyond eight weeks demonstrated more sustainable and pronounced performance gains. **Conclusion:** High-performance training programs are effective in improving the overall athletic performance of college volleyball players when they incorporate multidimensional approaches tailored to sport-specific demands. Coaches and strength and conditioning professionals should consider individualized, periodized programs that integrate strength, power, agility, and skill training for optimal athlete development. Future research should explore the long-term effects and gender-specific adaptations to high-performance training in collegiate volleyball contexts.
Keywords: Volleyball, Training, Performance

#37. Research on Community Sports Environment in Multicultural Adaptability

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Under the background of urbanization and cultural integration, the multicultural adaptability of community sports environments is insufficient, which affects the equalization of sports participation and social integration. **Purpose:** Based on the strategy of “Healthy China 2030” , this study analyzes the composition and mechanism of the community sports environment according to the theory of cultural adaptation and the social ecological model, aiming to build a culturally inclusive and demand-responsive optimization path to support the improvement of the quality of public sports services and the construction of urban cultural communities. **Methods:** Literature method, case study method, questionnaire survey method and interview method were used. **Results:** The community sports environment has problems such as insufficient cultural inclusion and low participation of some cultural groups. Introducing the principle of culturally sensitive design and promoting transformation from the dual dimensions of space creation and activity organization is the key to enhancing inclusiveness. Based on this, optimization strategies are proposed: establishing a collaborative governance model and evaluation mechanism for multiple actors to promote fair distribution and efficient use of resources; government-led integration of resources and planning of a 15-minute sports facility network; and establishing a synergistic mechanism among the government, schools, and community organizations to promote the joint use of sports facilities and other resources. **Conclusion:** Multicultural adaptability is key to improving the quality of community sports environments. Optimization strategies are effective in enhancing the inclusiveness of facilities, promoting social integration, and efficiently using resources. Cultural adaptability should be incorporated into the core indicator system of community sports planning to promote dynamic adjustment and collaborative governance. Future research can expand the research perspective by developing a smart sports platform with intelligent technology. Policymakers should promote the standardization of cultural adaptability assessment to facilitate the implementation of the Healthy China strategy.
Keywords: multicultural adaptation, community sport environment, optimization strategies

#40. Digital Sports and Proactive Health Integration Research

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With the rapid development of digital technology, the integration of digital sports and proactive health has emerged as a prominent area of research and application, transforming traditional health management and sports training paradigms. **Purpose:** To comprehensively investigate the integration of digital sports and proactive health. **Methods:** A multi-methodological approach was adopted, combining literature review, case study analysis, and empirical research. Key databases, including PubMed, Web of Science, and CNKI, were searched using relevant keywords such as "digital sports," "proactive health," "wearable devices," and "virtual reality." **Results:** Studies have shown that the integration of digital sports included wearable devices (e.g., smartwatches and fitness trackers), virtual reality (VR) and augmented reality (AR). Participants in the intervention group showed a significant increase in physical activity levels compared the control group, indicating the effectiveness of digital sports technologies in promoting physical activity. Artificial Intelligence (AI) algorithms can analyze large volumes of health data to provide personalized recommendations and predictions. There were significant reduction in body fat percentage and improved cardiovascular health observed in the intervention group. Participants reported high levels of satisfaction (i.e., convenience, personalization, and motivation) with the digital sports technologies. However, security and privacy of personal health data is a critical concern to build trust and encourage widespread adoption. Older adults, may lack the necessary technological skills to effectively use digital sports technologies. **Conclusion:** The integration of digital sports and proactive health represents a transformative approach to health management, leveraging technology to empower individuals to take control of their health. Governments and regulatory bodies can play a crucial role in promoting the adoption of digital sports technologies by providing funding, incentives, and regulatory frameworks. Future research should focus on addressing current challenges, exploring new technologies, and evaluating the long-term effectiveness of digital sports technologies in proactive health management.
Keywords: artificial intelligence, virtual reality, augmented reality, physical activity

#45. Do Protein Infused Beverage Affect Aerobic Fitness?

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Purpose: Investigate the effects of PI drinks on aerobic fitness and perceived exertion in males. **Methods:** Ten males volunteered (age: 25.54 ± 2.62 years, height: 171.98 ± 6.93cm, weight: 63.9 ± 9.15kg) in this study, which adopted a randomized crossover design with a 7-day washout period between each trial. Participants consumed 500ml of either water or PI beverage on first session, followed by the other drink in the next session. Participants rested an hour before running the modified Astrand protocol and test was terminated upon volitional exhaustion. Treadmill speed was kept at 10km·h^{-1} throughout with only gradient increment at 2.5% for the first 3-minute and subsequently for every 2-minute. Heart rate (HR) and rate of perceived exertion (RPE) were obtained with a Polar HR transmitter and OMNI RPE scale respectively, at the last 10-second of each stage. Blood lactate (Bla) via finger prick was obtained immediately, and at the 3rd and 5th minute upon termination. **Results:** No significant difference was observed in VO_{2max} (water: 3.41 ± 0.67ml·kg^{-1}·min^{-1} vs. PI: 3.56 ± 0.66ml·kg^{-1}min^{-1}, p = 0.26) and time to exhaustion (TTE) (water: 727 ± 151.1s vs. PI: 745.6 ± 140.43s, p = 0.50) between the two beverages. No significant difference was observed in percentage of maximal HR (%HR_{max}) at end stage between the two drinks (water: 93.41 ± 7.41%,

PI: 93.87 ± 5.35%). Significant differences were observed in main effects of treatment ($p < 0.001$) and interaction between treatment and time ($p = 0.00$) in Bla (water; 0min: 9.42 ± 2.58mmol·L^{-1}, 3min:9.6 ± 2.32mmol·L^{-1}, 5min: 10.15 ± 2.62mmol·L^{-1}, PI; 0min: 8.56 ± 2.45mmol·L^{-1}, 3min: 8.17 ± 2.85mmol·L^{-1}, 5min: 8.05 ± 2.73mmol·L^{-1}). No significant differences were observed in main effect of time ($p = 0.95$) in Bla. **Conclusion:** Consumption of water and PI beverages showed significant difference in Bla produced from the aerobic test over time. VO_{2max}, TTE and $\%HR_{max}$ at end stage were not influenced by drinks ingested. Further studies could investigate the effects of protein drinks for sprints due to the significant reduction in Bla.
Keywords: Adults, Running, Rate of Perceived Exertion

#46. Integrating Sports into the Curriculum: Benefits and Challenges in Holistic Education

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This study investigates the integration of sports into academic curricula as a fundamental component of holistic education. The research investigates the potential of sports to improve the physical, emotional, social, and cognitive development of students. **Purposes:** The research aims to investigate the advantages of incorporating sports into the educational curriculum, emphasizing student development in physical health, cognitive skills, emotional intelligence, and social competencies. It seeks to identify and analyze the challenges schools encounter in implementing sports programs, including resource constraints, teacher readiness, and the equilibrium between academic obligations. Additionally, it will evaluate the effect of sports participation on students' academic performance. **Methodology:** The researchers devised 30 questions for teachers and 30 questions for students enrolled in the Sport and Science Program in Myanmar. All data are presented in graphs and pie charts utilizing SPSS. **Results:** The findings advocate for a holistic strategy that considers athletics as essential components of the overall educational experience, rather than simply extracurricular activities. **Conclusion:** The research concludes with strategic recommendations for curriculum designers, legislators, and educational leaders to effectively implement sports-based education, hence ensuring equitable and inclusive student development.
Keywords: Sports Education; Holistic Education; Curriculum Integration; Physical Education; Student Development; Educational Policy

#49. Classroom Physical Activity Breaks Enhance Learning Engagement in Chinese Primary Students

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Currently, Primary school students are facing a dual “invisible crisis” of health and learning. Global moderate-to-vigorous activity has fallen by 41%, undermining youth health. Additionally, sedentary behavior and lack of physical activity can impair learning. WHO and national policies thus urge brief, frequent activity breaks in class. Implementing these breaks is essential for students’ learning and development. **Purpose:** This study evaluates the feasibility of introducing physical activity into elementary school classrooms and examines its impact on students’ school engagement. It aims to

provide a novel intervention pathway for enhancing elementary students' learning engagement and to offer a practical platform for improving their physical fitness. **Method:** This study employed a mixed-methods design. Participants were 249 fourth-grade elementary students. Four classes were randomly assigned—two to the intervention group and two to the control group. Over eight weeks, the intervention group received at least one 2–3-minute classroom activity break each weekday. The SEM demonstrated strong internal consistency (Cronbach's α = 0.834), a Kaiser–Meyer–Olkin value of 0.833, and a significant Bartlett's test of sphericity ($p < 0.001$), indicating good validity. **Results:** Activity breaks significantly boosted overall engagement ($p = 0.000$), improving behavioral engagement ($p = 0.000$), emotional engagement ($p = 0.009$), and cognitive engagement ($p = 0.014 < 0.05$). For boys, behavioral engagement ($p = 0.003$) and emotional engagement ($p = 0.044$) rose, but cognitive engagement did not ($p = 0.076$). For girls, behavioral engagement ($p = 0.003$) and cognitive engagement ($p = 0.048$) improved, while emotional engagement remained unchanged ($p = 0.113$). **Conclusion**: Activity breaks in the classroom promote physical activity and learning engagement, which can lead to positive student well-being. Future research should tailor breaks to subject and age, use objective monitoring, and enhance teacher training and resources.
Keywords: Sedentary behavior, Physical activity level, Classroom physical activity breaks, primary school students, Learning engagement.

#51. Effects of exercise on bone mineral density in 6-12 years old children: a systematic review and Meta-analysis

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As global health awareness rises, children's bone health is receiving international attention, with international organizations such as the International Osteoporosis Foundation emphasizing that childhood is a critical window for bone development. **Purpose:** To systematically evaluate the effects of exercise interventions on bone mineral density in 6-12 years old children and to explore effective exercise modalities to improve bone mineral density in children. **Methods:** PubMed, Web of Science, EBSCO and other databases were used to search for relevant randomized controlled trial studies. The intervention modalities included exercise type, exercise cycle and exercise duration; and the outcome index was bone mineral density content. After screening the literature, extracting information and evaluating the risk of bias of the included studies, Meta-analysis was performed using Review Manager 5.4 software. **Results:** A total of 18 papers were included. Meta-analysis showed that exercise could increase the bone mineral density content of children. Different types of exercise, different exercise cycles and different exercise durations had different intervention effects on the bone mineral density of children. Ulti-directional loading ($P<0.0001$) exercise interventions were better than high-impact and low-impact exercises. Exercise interventions with an exercise cycle of more than 12 weeks ($P=0.002$) were better than those with an exercise interventions with an exercise cycle of 12 weeks and less, and exercise interventions with an exercise duration of 45 minutes or more ($P < 0.00001$) were superior to exercise interventions with an exercise duration of 45 minutes and less. **Conclusion:** There were differences in the effects of different exercise interventions on bone mineral density in children, with multidirectional loading exercise interventions that involved exercise for more than 12 weeks and lasted more than 45 minutes at a time having the most significant effects on bone mineral density in 6-12 years old children.
Keywords: 6-12 years old children; bone mineral density; exercise; meta-analysis

#57. Caffeine Dosing Strategies to Enhance Power and Sprint Performance in Male 100m Sprinters

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Purpose: This study aimed to investigate the acute effects of different doses of caffeine (3 and 6 mg/kg) on sprint performance, countermovement jump (CMJ), and anaerobic power in trained male 100-meter sprinters. **Methods:** Twenty-one male 100-meter sprinters (age: 20 ± 1.45 years; 100 m time: 11 ± 0.24 s) participated in a randomized, double-blind, crossover trial. Each participant completed three trials in a counterbalanced order with a one-week washout between conditions: placebo (PLA), low-dose caffeine (CAF3, 3 mg/kg), and moderate-dose caffeine (CAF6, 6 mg/kg). Caffeine was administered in capsule form. After ingestion, participants completed a 60-meter sprint, followed by a CMJ and a 10-second Wingate anaerobic test. Repeated-measures ANOVA was used for statistical analysis ($P < 0.05$). **Results:** The CAF3 and CAF6 groups showed significantly higher CMJ heights than the PLA group (53.9 ± 1.1, 55.5 ± 1.1, and 51.4 ± 1.1 cm, $P < 0.001$). Peak power (PP) and mean power (MP) were significantly higher in the caffeine groups than the PLA group (PP: 867.4 ± 29.1, 871.0 ± 24.5, and 797.7 ± 30.9 W, $P < 0.001$; MP: 400.5 ± 31.7, 396.7 ± 28.0, and 282.5 ± 23.6 W, $P < 0.001$). The caffeine groups demonstrated significantly better 60-meter sprint times (7.094 ± 0.037, 7.042 ± 0.035, and 7.217 ± 0.044 s, $P < 0.001$). Reaction time was significantly reduced in the caffeine groups (0.162 ± 0.003, 0.161 ± 0.003, and 0.180 ± 0.003 s, $P < 0.001$). No significant differences were observed in stride length or stride frequency across groups (stride length: 1.44 ± 0.02, 1.44 ± 0.02, and 1.43 ± 0.02 m, $P = 0.593$; stride frequency: 4.20 ± 0.05, 4.32 ± 0.50, and 4.28 ± 0.04 Hz, $P = 0.449$). The maximum and average rate of force development (RFD) values were significantly higher in the caffeine groups than the PLA group (maximum RFD: 45.3 ± 0.9, 50.0 ± 1.2, and 40.3 ± 1.1 N/kg/s, $P < 0.001$; average RFD: 18.3 ± 0.9, 20.5 ± 1.0, and 15.1 ± 0.7 N/kg/s, $P < 0.001$). **Conclusion:** Acute caffeine supplementation significantly enhances lower-body power, anaerobic capacity, and start performance in sprinters. While both 3 mg/kg and 6 mg/kg doses are effective, 6 mg/kg may provide additional short-term benefits. These findings support the strategic use of moderate-dose caffeine in sprint-specific contexts.
Keywords: caffeine; sprint performance; anaerobic power

#62. A Study on the Practical Path of Situation Creation in Large Unit

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Creating meaningful context is essential to reforming large-unit teaching in physical education and health. It helps bridge the gap between knowledge, skills, and learners, making learning more relevant and effective. However, current practices often remain fragmented and decontextualized. **Purpose:** This study explores how context construction supports student learning in large-unit teaching by analyzing its theoretical basis and practical pathways. **Methods:** A literature review was conducted using CNKI, official educational websites, and curriculum standards (e.g., the 2022 Compulsory Education Physical Education and Health Curriculum Standards). Keywords included “large-unit teaching,” “contextualization,” and “situational learning.” Domestic and international theories were synthesized, and logical analysis was applied to examine the alignment between knowledge, skill acquisition, and context. **Results:** Three major disconnections in traditional PE instruction were identified: (1) separation of knowledge and skills from learners, resulting in mechanical repetition; (2) detachment of knowledge from its production context, reducing authenticity and practicality; and (3) lack of application scenarios, making it difficult for students to grasp the value

and relevance of what they learn. These gaps hinder the internalization and transfer of knowledge. **Conclusion:** To overcome these issues, large-unit teaching should focus on embodied, meaningful learning. A future-oriented model is proposed: (1) engaging learners physically and cognitively to enhance presence and understanding; (2) integrating knowledge with its production context to enable critical analysis and reconstruction; and (3) fostering dialogue between knowledge and application contexts through interaction, reflection, and practice. This supports both subject competency and core literacy development.
Key words: Physical education and health curriculum; Large unit teaching; Situation creation

#64. Level of compliance with 24-hour activity behaviors in 3 to 6 years old children: a systematic review and Meta-analysis

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Adherence to 24-hour exercise guidelines is associated with multiple health benefits in children, and there is a lack of consensus regarding the level of adherence to 24-hour activity behaviors in 3 to 6 years old children. **Purpose:** The aim of this study was to explore the extent of compliance with 24-hour activity behaviors among 3 to 6 years old children globally and across gender differences. **Methods:** PubMed, Web of Science, Embase, Google Scholar, China Knowledge, Wanfang database, and VIP database were searched with a time frame from 2015 to March 1, 2025. Literature screening, data extraction, and literature quality evaluation were independently performed by 2 researchers based on inclusion and exclusion criteria. **Results:** (1) Overall compliance with 24-hour activity behaviors among 3 to 6 years old children was 49%, with the highest level of compliance with sedentary behaviors (44%), and the lowest level of compliance with physical activity (36%); (2) The level of compliance with 24-hour activity behaviors showed significant gender differences in compliance, with boys having significantly lower compliance than girls for physical activity (42%/ 58%) and sedentary behaviors (58%/ 65%), boys for sleep behaviors (62% /53%) were significantly more compliant than girls; (3) 24-hour activity behaviors (40% /63%) were significantly less compliant than those for 3 to 6 years old children in China. The most significant difference followed sedentary behaviors (35% /76%).
Conclusion: Compliance with 24-hour activity behavior among children aged 3-6 years is not optimistic, and the overall compliance level is only moderately low, with significant gender and national and international differences. Future research needs to focus on the following points: first, in-depth investigation of the factors affecting 3-6 year-old children's compliance with 24-hour activity behaviors, including the specific effects of family environment, social culture, etc.; and second, the development of interventions based on different regions and populations, to verify the effectiveness of interventions in improving children's compliance with activity behaviors.
Keywords: 3 to 6 years old children; 24-hour activity behavior; sedentary behaviors; meta-analysis

#67. The Influence of Self-Efficacy on PE Majors' Participation in Innovation Training Programs: The Mediating Role of Expectancy-Value

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In the context of vigorously promoting innovation and entrepreneurship education reform in Colleges and Universities, currently, although innovation and entrepreneurship education has made certain progress, most existing studies focus on external factors such as project management and curriculum systems, with remarkably insufficient attention to students' internal psychological motivations for participating in programs. Due to the long-term influence of practice-oriented training models, PE majors generally suffer from weak theoretical foundations and poor research capabilities, which makes their value cognition and participation intention toward innovation training programs both in urgent need of significant improvement. **Purpose**: Relying on self-efficacy theory and expectancy-value theory, this study will deeply to explore the specific impacts of self-efficacy and expectancy-value on the participation intention of PE majors in this program. **Methods:** The revised Self-Efficacy Scale, Expectancy-Value Scale, and Participation Willingness Scale were used to conduct an online survey among PE majors. A total of 644 PE majors participated in the questionnaire survey, and finally 402 valid questionnaires were obtained. Data analysis was performed using SPSS 22.0 and PROCESS V4.1. **Results:**(1) The self-efficacy, expectancy-value, and participation intention of PE majors all are at a moderately above-average level, and there is a highly significant positive correlation among the three.(2) Both self-efficacy and expectancy-value can significantly and positively predict the intention of PE majors to participate in the innovation training program.(3) Expectancy-value plays a key role as a partial mediator between self-efficacy and the intention of PE majors to participate in the innovation training program. **Conclusion:** Both self-efficacy and expectancy-value have significant positive predictive effects on the participation intention of PE majors in innovation training programs, indicating that the higher the self-efficacy and expectancy-value, the more likely students are to participate in the innovation training program. Expectancy-value plays a partial mediating role between self-efficacy and participation intention.
Keywords: self-efficacy; participation intention; expectancy-value

#68. Analysis of the Path for Embedding Grassroots Sports Organizations into Rural Governance: Based on Field Observations of Typical Cases

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The modernization of rural governance is an important component of the modernization of the national governance system and governance capacity. The governance effectiveness of grassroots sports organizations embedded in rural governance is increasingly prominent, but there are still difficulties in external support and internal governance, and the detailed implementation rules for organizational construction are lacking. The internal driving force of the organization is relatively insufficient; The shortage of basic guarantee resources. **Purpose:** Explore a more reasonable and accessible integrated governance path. **Methods:** Conduct a key on-site investigation of the football association of Qibabao Village as empirical support; Interview the deputy director of the local culture, sports and tourism bureau, the relevant person in charge of the Qibabao Village Football Association, and experts from the Jiangsu Provincial Sports Bureau to understand the current situation and path of the development of grassroots sports organizations; A detailed analysis of the "Village Boundary Cup" event in Qibabao Village is conducted. **Results:** The Football Association of Qibabao Village has been integrating into rural governance by undertaking grassroots public sports services, promoting the construction of rural sports venues and facilities, organizing "Village Boundary Cup" events with farmers as the main body, and developing football education. However, grassroots sports organizations still face practical predicaments such as the lack of detailed implementation rules for construction, relatively insufficient internal driving force, and shortage of basic guarantee resources. **Conclusion:** External support: Refine the guarantee and guidance of policies and regulations, improve the supply of rural characteristic sports venue resources, and establish a collaborative governance mechanism; Promote the professional development of grassroots sports

organizations: Improve the organizational management charter, strengthen personnel training, and broaden the channels for sources of funds; Encourage the participation of multiple entities in governance.
Key words: Grassroots sports organizations ， National Fitness， Rural governance

#69. Effects of physical activities on self-efficacy among Chinese adolescents: a systematic review and Meta-analysis

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Adolescence is a critical period for developing healthy behaviors. Declining student fitness correlates with emerging mental health issues. Self-efficacy enables individuals to make subjective assessments of their own capabilities. Physical activities, as a means to enhance physical fitness, can effectively boost adolescents' self-efficacy and ultimately promote physical and mental health development. **Purpose:** This study aims to explore the effects of various domestic physical activities and their frequencies on the self-efficacy of teenagers, with the expectation of promoting the physical and mental health development of teenagers. **Methods:** Relevant literature was searched in Chinese databases such as CNKI, Wanfang, and VIP. The Cochrane literature quality assessment tool and Review Manager 5.4 software were used to statistically analyze the final results. **Results:** A total of 9 studies were included, with 1,098 participants, aged 12 to 18 years . The effect of physical exercise on the self-efficacy of adolescents is significant (SMD=0.80, 95%CI [0.48,1.13], I^2=82%, p<0.00001). There is a relatively high heterogeneity among the various studies. Subgroup analysis showed that different forms of physical exercise and different frequencies of physical exercise were the sources of heterogeneity. Different forms of physical exercise can all improve the self-efficacy of adolescents (SMD=0.80, 95%CI [0.48, 1.13], p<0.00001, I^2=82%). Among them, football training has a significant enhancing effect on the self-efficacy of adolescents (SMD=1.57, 95%CI [1.29,1.86], p<0.00001). Physical exercise of different frequencies can affect the self-efficacy of adolescents (SMD was 0.80, 95%CI [0.48, 1.13], p<0.00001, I^2=82%). Physical exercise activities twice a week (SMD=0.82, 95%CI [0.26,1.38], p<0.00001) and three times a week (SMD=0.84, 95%CI [0.35,1.32], p<0.00001) had a more significant impact on the self-efficacy of adolescents. **Conclusion:** Engaging in sports activities such as ball games, aerobic exercise or strength training more than twice a week can effectively enhance teenagers' self-efficacy and promote their physical and mental health development.
Keywords: physical activities, teenagers, self-efficacy, meta-analysis

#70. Practical Research on the Empowerment of Primary School Teaching by Intelligent Technology

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Purpose: This study, based on the Chinese Healthy Physical Education Curriculum Model (CHPECM), combines digital intelligence technology with AI to address the problems existing in primary school P.E. classes. Through dynamic feedback and structured teaching strategies empowered by digital technology, students develop key abilities and stable character in real situations, ultimately achieving the curriculum goal of core literacy in physical education. **Methods:** Based on the multi-case analysis method, this study selected three grade levels (Grades 1-3) of a primary school in China as the research subjects. Through the analysis of three teaching scenarios, it explored the practical path and teaching effectiveness of the integration of "learning, practicing, and

competing" under different age groups and skill goals. This study relied on wearable devices and an AI analysis platform to collect real-time data such as students' heart rate and class density during class periods, and combined with the analysis of classroom videos and lesson plan to form multi-dimensional feedback. **Results:** (1) The combination of digital intelligence technology and the CHPECM effectively addresses issues such as fragmented content, monotonous methods, and insufficient exercise load in P.E. classes, and enhances the logic of teaching. (2) The AI-enabled exercise load monitoring technology enables scientific management of classroom load. The average heart rate of the three classes (151 bpm for crawling, 147 bpm for basketball, and 152 bpm for football) is between 80% and 88% of the group's physical activity density. (3) Teachers can quickly identify students' status through real-time data in class, adjust exercise load and organization, taking into account both classroom safety and exercise effect. **Conclusion:** This study validated the practical value of the CHPECM empowered by digital intelligence technology in primary school teaching, achieving scientific management of classroom load through structured instructional design and AI monitoring technology, and dynamic feedback mechanisms to assist teachers in regulating teaching strategies.
Key words: Digital intelligence technology; Chinese Healthy Physical Education Curriculum Model; Primary school physical education

#71. Exploring the Relationships Between College Students' Exercise-Related Basic Psychological Needs, Self-Efficacy, and Psychological Resilience

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Purpose: This study aims to investigate the correlations between college students' basic psychological needs in exercise and self-efficacy, as well as between their basic psychological needs and psychological resilience, providing theoretical support for the design of physical education curricula and sports psychological intervention strategies in higher education institutions. **Methods:** A questionnaire survey method was employed in this research. A total of 802 college students were recruited as the research subjects. Three standardized scales were utilized to gather data:(1) Sports Mental Toughness Questionnaire (SMTQ) (14 items, 7-point Likert scale) assesses confidence, determination, and control; six reverse-scored items reflect psychological resilience with good reliability/validity. (2) Youth Physical Fitness and Sports Psychological Needs Satisfaction Scale (12 items, 7-point scale) measures autonomy, competence, and relatedness; Cronbach's α (0.89–0.92) and factor analysis verify reliability/validity. (3) Exercise Self-efficacy Scale (12 items, 1–3 scoring) shows Cronbach's α = 0.87 and good model fit (RMSEA = 0.06, CFI = 0.95). **Results:**1. A positive correlation was found between basic psychological needs and self-efficacy ($r = 0.413$, $p < 0.001$). Similarly, basic psychological needs were positively correlated with psychological resilience ($r = 0.242$, $p < 0.001$).2. Self-efficacy was also positively correlated with psychological resilience ($r = 0.203$, $p < 0.001$). These results indicated that a higher level of satisfaction of sports related psychological needs was associated with stronger self-efficacy and psychological resilience, and there was a synergistic enhancing effect between the two. **Conclusion:** The satisfaction of basic psychological needs in sports directly promoted self-efficacy. Regarding its influence on psychological resilience, it might be achieved through multiple pathways. The disconnection between psychological traits and short term behavioral decisions implies that in the design of college physical education courses, the cultivation of intrinsic motivation should be given priority, rather than relying solely on the course selection mechanism.
Key words: Self efficacy; Psychological resilience; Sports psychological needs

#72. A Comparison of Fundamental Movement Skills between Urban and Rural School Children

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Fundamental movement skills (FMS) are a necessary prerequisite for individuals to engage in various physical activities and competitive sports, and they are also an important component of children's physical literacy. **Purpose:** This study revealed the characteristics of FMS among urban and rural school children aged 7-9 years in China, and explored the differences in FMS levels between urban and rural school children from the perspectives of school type and gender factors. **Methods:** A total of 361 children aged 7-9 years from urban and rural schools in a certain region of China were selected, including 160 rural children and 201 urban children. Indicators of mobility skills (sideways slide running, single-leg continuous hopping), object control skills (switch hands and shoot on the spot, kicking over obstacles), and stability skills (balance beam walking, backward straight-line walking) were obtained through the Children's Fundamental Movement Skill Test (CFMST).Data were processed using independent samples t-test, Mann-Whitney U test, analysis of variance, and multiple regression analysis. **Results:** All the indicators of CFMST for urban children were significantly higher than those for rural children. Among them, the indicators of sideways slide running and backward straight-line walking showed a very significant difference between urban and rural areas ($p < 0.01$). There were significant differences between urban and rural areas in indicators such as single-leg continuous hopping, switch hands and shoot on the spot, kicking over obstacles, and balance beam walking($p < 0.05$). School type significantly influenced sideways slide running in children aged 7-9 years ($p < 0.01$),while gender showed no significant effect. The type of school is the main influencing factor for the differences in children's FMS ($R^2=0.593$) .**Conclusion:** The FMS level of children in urban schools is better than that of their rural peers. The urban-rural disparity is an important factor affecting the development of FMS. These findings emphasize the need to enhance the fair allocation of sports resources among regions.
Keywords: Fundamental movement skills; Children in urban and rural schools; Difference

#73. From attendance to purchase: The relationship between games attendance motivations and sports consumption behavior among international students

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Over the past several years, college football has experienced a decline in attendance. With a decline in attendance, college athletic departments are starting to seek ways to increase participation and lure fans back to the stadium. However, one segment of potential college football spectators, international students are overlooked. **Purpose:** The purpose of this study was to investigate the motivations of international students attending college football games and examine the relationship between football game attendance motives and attendance, and the influence of attendance on future sports consumption behavior. **Methods:** The data in this research will be collected by sending emails with questionnaires to target participants. The questionnaire consists of made by Trail, and James (2001), and sports consumption scale created by Kiremitci, Demiray, Gençer, and Aycan (2014), which has two segments: attendance motivations scale and future consumption behavior scale. **Results:** Based on the results, participants had the highest level of agreement with achievement (M=5.22, SD=1.63), followed by drama (M=5.09, SD=1.35) and physical skills (M=5.09, SD=1.35). The participants had the lowest level of agreement with physical attraction (M=3.82, SD=1.59) and knowledge (M=3.95, SD=1.50). The new factor of motivation in this scale, novelty, was indicated with

a mean of 4.94 (SD=1.35, R=0.89). For the total consumption variable, all nine items were added together to create the variable of consumption with a range from 9 to 63 (M=39.91, SD=12.52), and 63 represents the highest consumption. **Conclusion:** Achievement, drama, and physical skills are three salient motives that drive international students to attend college football games. There was no significant difference based on consumption and university attachment upon gender. Drama is moderately more important for male students to attend. This study did not find a significant difference base on university attachment upon class standing. Physical attraction is moderately more important for upper-class students to attend.

Key words: Attendance motivations, Consumption behavior, International students

#74. The Internal Mechanism and Pedagogical Implementation of Fostering Expert Thinking in Physical Education and Health Courses from a Large Unit Perspective

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The development of expert thinking is emphasized in global curriculum reforms. Chinese and international standards, including the 2022 Physical Education and Health Curriculum Standards and SHAPE America's National Standards, highlight the need to cultivate students' problem-solving and decision-making skills. Yet, current PE teaching often focuses on surface knowledge, isolated skills, and lacks real-world integration, limiting the formation of expert thinking. **Purpose:** To explore how large-unit teaching can cultivate expert thinking in physical education by leveraging the ACT model: Acquisition, Connection, and Transfer. **Methods:** Three methods were used: (1) Literature review—synthesizing research and policy documents to build a theoretical base; (2) Logical analysis—examining the links between large-unit teaching, core literacy, and expert thinking; (3) Case study—analyzing Grade 4 and 7 aerobics units to identify strategies aligned with students' needs and curriculum goals. **Results:** Expert thinking involves pattern recognition, cognitive flexibility, and reflective ability. It is fostered through: (1) curriculum concepts guiding deep knowledge acquisition; (2) project culture supporting embodied learning; (3) student development promoting real-situation transfer. Key teaching strategies include aligning learning with cognition, extracting core concepts, and designing authentic tasks for high-level application. **Conclusion:** Large-unit teaching supports expert thinking by integrating structured content, real contexts, and progressive learning. It enhances higher-order cognition, encourages flexible application of skills, and deepens students' core literacy in physical education.
Key words: Large-unit teaching; physical education and health courses; expert thinking

#75. Human-AI Collaborative Teaching Design for Physical Education Teachers in the Era of Artificial Intelligence: Reality Check and Practical Logic

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Purpose: Human-AI collaborative instructional design is vital in physical education (PE) reform. New curriculum standards emphasize structured content and complex skill contexts, increasing design complexity. Current challenges include weak curriculum translation and limited innovation, hindering competency-oriented teaching. Generative AI offers solutions through semantic analysis and content generation. However, existing studies focus on macro-level ethics or teacher development, lacking micro-design insights. This research explores mechanisms, barriers, and practices of human-AI

collaboration in PE design to enhance AI integration and address curriculum translation/innovation challenges. **Methods:** Literature review, logical analysis, and interviews were employed. Policy documents (State Council, Ministry of Education) and CNKI core publications (2020-2025) were analyzed. Interviews with PE experts and practitioners identified AI adoption barriers and needs. **Results:** Policy shifts toward dynamic curriculum paradigms enable AI integration. Human-AI synergy combines teacher expertise with AI data/logic for competency-based teaching. AI aids curriculum translation, goal-setting, and scenario design. Barriers: Weak adoption due to training gaps and low AI literacy; technical limits in quantifying embodied motor skills, causing value conflicts; algorithmic opacity (privacy/dataism risks); over-reliance risks design autonomy loss and cognitive dependency. Solutions: Build AI training systems; develop sports-specific AI models; establish teacher-led collaborative frameworks. **Conclusion:** Generative AI marks the start of AI-PE integration. Teachers must evolve from users to educational meaning-makers. Future efforts should enhance AI literacy while preserving pedagogical values in digital transformation.
Keywords: Artificial intelligence; PE teachers; instructional design; human-AI collaboration; digital literacy

#77. Professional Identity and Subjective Well-being of Chinese Junior High School PE Teachers: The Mediating Effect of Job Satisfaction

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Purpose: China's "double-reduction" mandate and redesigned entrance fitness test push middle-school PE teachers from fostering interest toward exam drilling. These reforms intensify workload, widen the gap between social recognition and pedagogical contribution, and sharpen performance evaluations, thereby eroding professional identity and subjective well-being (SWB). This study examined the impact pathway from professional identity to SWB and tested the mediating role of job satisfaction. **Methods:** Using stratified cluster sampling, 325 in-service Chinese PE teachers collectively completed validated instruments assessing four identity dimensions (occupational values, role values, sense of belonging, behavioural disposition), job satisfaction, and SWB. Structural-equation modelling with maximum-likelihood estimation and 5000-sample bias-corrected Bootstrap analyses evaluated direct and indirect effects. **Results:** Role values predicted job satisfaction ($\beta = 0.372$, $p < 0.001$) and directly elevated SWB ($\beta = 0.134$, $p = 0.025$). Occupational values, belonging, and behavioural disposition showed no significant direct links to SWB; nevertheless, each improved job satisfaction ($\beta = 0.233, 0.123, 0.150$). Job satisfaction fully mediated the effects of these three dimensions and partially mediated the influence of role values, with the indirect segment accounting for 63.7 % of its total impact. The final model explained 56 % of job satisfaction and 61 % of SWB, and showed acceptable fit ($\chi^2/df = 2.08$, CFI = 0.95, TLI = 0.94, RMSEA = 0.058). **Conclusions:** A strong professional identity enhances PE teachers' happiness by fostering job satisfaction, which acts as an affective compensator under high-stakes reform. Role values confer direct hedonic gain plus satisfaction-driven spill-over, whereas occupational values, belonging, and behavioural disposition operate mainly through satisfaction, affirming a sequential "value identification → affective appraisal → well-being" mechanism. Administrators should clarify instructional roles, align evaluation criteria with intrinsic values, and cultivate collegial climates to preserve teacher well-being during current and future policy turbulence.
Keywords: professional identity; job satisfaction; subjective well-being

#83. Rule Awareness Scale Development in Youth Sports Education Under New Curriculum

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Purpose: Rule awareness is crucial to the social adaptability, cognitive development and moral character formation of adolescents. The Compulsory Education Physical Education and Health Curriculum Standards (2022 Edition) emphasize the cultivation of students' "good athletic ability, healthy behavior and sports ethics gradually formed through physical education and health curriculum learning", and rule awareness is the core indicator of sports ethics evaluation. However, the academic community is relatively lacking in measuring tools and methods for adolescent rule awareness in physical education, making it difficult to systematically and scientifically understand adolescent rule awareness. This study aims to enhance the pertinence and effectiveness of adolescent rule awareness cultivation by developing a set of rule awareness assessment scales with good psychometric characteristics. **Methods:** This study combined the methods of literature review, questionnaire and classroom observation, and selected 550 students aged 7-18 as the research subjects to develop the "Rule Awareness Assessment Scale for Adolescent Physical Education" for evaluation and analysis. **Results: (**1) The final scale included three dimensions of rule cognition, rule emotion, and rule behavior, with a total of 27 items; (2) The scale had good structural validity and met the fitting criteria (GFI, NFI, etc. all >0.9, RMSEA<0.05); (3) The scale had good reliability, with internal consistency reliability (Cronbach's α=0.92), split-half reliability (0.91), and test-retest reliability (0.87) all meeting the metrological requirements. **Conclusions: (**1) The development and application of this scale is a pioneering effort to systematically understand the rule cognition, emotion and behavior status of adolescents in physical education.(2) The scale can comprehensively reflect the level of rule awareness of adolescents in the context of physical education in China; (3) The scale has good reliability and validity among students aged 7-18, meets psychometric standards, and can be used as an effective assessment tool for rule awareness in physical education for teenagers in China.
Keywords: New Curriculum Standards; Teenagers; Physical education; Rule awareness; Scale development

#84. The influence of moderate to vigorous physical activity (MVPA) on the sustained attention of children and adolescents

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Sustained attention—the ability to maintain appropriate monitoring of events or stimuli over time, is critical to children's cognitive development, academic performance, and social adaptability. Emerging research suggests that moderate-to-high intensity physical activity enhances brain plasticity and optimizes neural networks related to attention and executive function by stimulating BDNF secretion and hippocampal activity. Addressing widespread issues such as attention deficits and low learning efficiency among children, this study seeks to provide a scientifically grounded intervention through structured physical exercise. **Purpose:** This study aims to investigate the impact of moderate-to-high intensity physical activity, specifically badminton training, on sustained attention among children aged 6–12, thereby offering an evidence-based strategy to improve learning ability and reduce stress and emotional problems related to attention deficits. **Methods:** A total of 120 children aged 6 to 12 were randomly assigned to either an experimental group or a control group. The experimental group participated in structured badminton training for 12 weeks, three to five times per week, while the control group continued with regular physical education activities. A controlled variable design was

used to compare outcomes between the two groups. **Results:** Badminton requires high levels of focus, rapid reaction, and postural adjustment, due to its small shuttlecock size, fast pace, and short airborne time. Heart rate during play typically rises to 60%–80% of maximum (a moderate-to-high intensity range), increasing cerebral blood flow and oxygen delivery. This improves energy metabolism in the prefrontal cortex, a key brain region for attention regulation. Enhanced prefrontal function helps mitigate fatigue-related inattention. **Conclusion:** Moderate-to-high intensity badminton training significantly enhances children's sustained attention by improving physiological and emotional readiness for learning. It is recommended that children engage in badminton three to five times per week. For sessions involving intense competition, durations of 20–30 minutes may suffice to avoid fatigue.
Key words: Badminton; Attention; Keep paying attention

#86. Research on the Impact of Different Sports Activities on Reducing Anxiety among College Students

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The "Outline for the Construction of an Education Power (2024-2035)" clearly states that "promoting the healthy growth and all-round development of students" and "implementing the education concept of prioritizing health and the plan for enhancing students' physical fitness". Research shows that exercise not only strengthens the body and fundamentally improves the problems of underweight and obesity among teenagers, but also helps relieve eye fatigue. Moreover, exercise releases endorphins and other "happiness hormones", thereby effectively improving emotional states and reducing negative emotions such as anxiety and depression. **Purpose:** This study aimed to explore the impact of different sports on alleviating anxiety among college students by comparing various sports. **Methods:** This study comprehensively employed the methods of literature review, questionnaire survey and classroom observation. A total of 320 students aged 18 to 20 were selected as the research subjects. The conditions were limited to participating in public physical education classes such as basketball, badminton, martial arts and frisbee for a total of fourteen weeks; the Self-Rating Anxiety Scale (SAS) was filled out for assessment and analysis. **Results:** (1) The scale consists of 20 items, covering four dimensions: physical and emotional, cognitive, neurological, and physical; (2) Participating in public sports classes such as basketball, badminton, martial arts, and frisbee all help alleviate students' anxiety, with varying degrees of relief; (3) Group activities and individual activities have different effects on students' anxiety relief. **Conclusion:** Participating in various sports activities can alleviate the anxiety of college students; participating in team-based activities is more effective in reducing anxiety compared to individual activities; it is recommended that college students engage in more team sports activities. By innovating teaching methods and adding interactive elements, through the nature of teamwork, the intense competitive atmosphere, and frequent physical confrontations, anxiety can be effectively. alleviated.
Keywords: different sports events, anxiety, alleviate anxiety

#87. Triple-E Principle: Leveraging Occam's Razor for Dance Energy Expenditure Estimation

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Dance presents challenges in accurately assessing energy expenditure (EE) due to its diverse styles and tempos. Traditional empirical formulas within ActiGraph accelerometers, often result in significant biases. While multiple wearable sensors have been introduced to mitigate these biases, they increase

model complexity. **Purpose:** to derive insights that contribute to the development of a unified framework for optimal EE estimation models and to quantitatively evaluate the dose-response relationship in dance. **Methods:** This study proposes the Triple-E principle—Effectiveness, Efficiency, and Extension—as a framework for developing state-of-the-art machine learning models aimed at accurately estimating energy expenditure, while minimizing model complexity and optimizing sensor placement. To validate the proposed approach, we recruited a cohort of 250 participants (mean age: 63.0 ± 6.0 years), each performing ballroom, aerobic, or square dance routines. Participants were fitted with ActiGraph wGT3X-BT accelerometers at five anatomical locations, along with the CORTEX MetaMax 3B as analyzer for metabolic data collection. We analyzed 311 physiological signal sequences and 1,555 acceleration count sequences. **Results:** Empirical formulas were proved inaccurate for dance energy expenditure, with Mean Absolute Percentage Error (MAPE) exceeding 50% and Root Mean Squared Error (RMSE) surpassing 3.23. A bidirectional stepwise regression model incorporating heart rate or triaxial motion sequences from accelerometers achieved an average goodness-of-fit of 0.73, identifying optimal accelerometer sites based on Efficiency principle. A random forest regression model minimized errors to 5% (MAPE) and 0.33 (RMSE) with data from all sites. Notably, wrist accelerometers and heart rate alone provided sufficient accuracy (RMSE: 0.35-0.36), highlighting a trade-off between Effectiveness and Efficiency. A deep-learning network pipeline based on the Extension principle automatically extracted features, achieving an average RMSE to 0.15. **Conclusion:** This study introduces a pioneering quantitative and unified model assessment system. Thoroughly analyzed and validated in the context of dance, the research offers detailed explanations of the most effective, efficient, and extensive models
Keywords: Energy expenditure, dose-response relationship, dance, machine learning, optimal modelling framework

#88. Combined Aerobic-Resistance Exercise Promotes Reversion from Metabolically Unhealthy Obesity in Youth

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Purpose: This study aimed to evaluate the effects of combined training modalities on facilitating the transition from MUO to MHO in young adults. **Methods:** This randomized clinical trial involved 60 obese college students (ages 18-25) in Beijing. 50 students completed the intervention and all the test. MUO characterized by obesity coupled with metabolic abnormalities like insulin resistance, dyslipidemia, hypertension, or systemic inflammation, while the MHO where individuals have obesity but lack major metabolic complications. Based on the criteria of the MUO, 30 participants were classified as MUO, while 20 were classified as MHO. Participants underwent a combined intervention of resistance training and MICT (50-75% HRmax), which was performed twice a week for a duration of 8 weeks. Body composition, weight, height, waist circumference (WC), blood pressure (BP), systolic blood pressure (SBP), diastolic blood pressure (DBP), fasting blood glucose (FBG), triglycerides (TG), and high-density lipoprotein cholesterol (HDL-c) were tested before and after the intervention. **Results:** After an 8-week combined exercise program, 52% of the MUO participants transitioned to the MHO state, while 20 MHO participants remained in the MHO state. RT+MICT intervention significantly improved body composition, with reductions in body weight, body mass index (BMI), and percent body fat (PBF). Regarding metabolic health indicators, blood pressure remained unchanged, whereas blood glucose levels decreased in both groups. Following the 8-week combined exercise, there were 374 differential metabolites observed in the MUO group transitioning to the MHO state, and 342 differential metabolites identified in the MHO group that remained in the MHO state. Key metabolic indicators related to the combined training modalities that facilitated the transition of MUO in youth included tetradecanedioic acid, 4-Ethylphenylsulfate, p-Cresol, p-Cresol sulfate, Cholic acid, 1,4-dihydroxyheptadec-16-en-2-yl acetate, 7a-Hydroxy-cholestene-3-one, and

Hypocrellin A. **Conclusion:** Combined exercise intervention effectively improves the metabolic abnormalities associated with MUO and promote its transition to the MHO state.
Keywords: Metabolic Abnormalities; Key metabolic indicators; Combined Aerobic-Resistance Exercise

#90. Enhancing Volunteer Preparedness and Event Delivery: A Comprehensive Framework for Multisport Events Training Model

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Effective volunteer management is essential for successful large-scale sporting events. This study presents a scalable volunteer training framework that integrates role-specific protocols, psychosocial support, and scenario-based learning to enhance performance, operational resilience, and stakeholder satisfaction at the 15th National Games Macau competition zone. **Purpose:** This study aims to develop and assess a volunteer training framework for the Macau competition zone, codifying roles, service protocols, and emergency procedures into a structured manual. This initiative aims to improve preparedness, streamline operations, and boost satisfaction for participants and spectators. **Methods:** A multidisciplinary team conducted a needs analysis through interviews with stakeholders and a review of best practices in volunteer management from events like the 2022 Beijing Winter Olympics, 2023 Hangzhou Asian Games, and 2024 Harbin Winter Asian Games. The 12-chapter manual covers event overview, volunteer ethos, etiquette, communication, role-specific procedures, resilience, and media literacy. Training was delivered via online modules, workshops, and simulations. Performance was assessed using pre- and post-training questionnaires (n=250), audits, and satisfaction surveys. **Results:** Post-training assessments showed improvements in confidence (+45%), procedural knowledge (+52%), and communication (+48%). Audits revealed a 30% reduction in service delays and a 25% decrease in volunteer-related incidents. Satisfaction surveys indicated a 20% increase in service quality. Feedback highlighted the value of scenario exercises in building resilience and team cohesion. Results from past events (e.g., Beijing 2022, Hangzhou 2023) showed similar improvements in performance. **Conclusion:** The volunteer training framework effectively enhanced service quality and operational efficiency at large-scale sports events. By combining technical procedures with psychosocial support, the modular design addresses key challenges in volunteer management, ensuring a smooth event experience for all stakeholders. This scalable model can be applied to future events, promoting continuous improvement in volunteer management.
Keywords: Volunteer Training; Sports Event Management; Operational Efficiency

#91. Association Between Mental Well-Being, Body Composition, and Physical Activity Among Adolescents in the Eastern Cape, South Africa

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Adolescence is a critical developmental period where physical and mental health are closely intertwined. Emerging evidence highlights that excess body fat may negatively impact mental well-being. In South Africa, particularly the Eastern Cape, limited research has explored these associations among adolescents. **Purpose**: This study aimed to investigate the association between mental well-being, body composition, and physical activity among adolescents in the Eastern Cape, aligning with the conference theme of adolescent health and development. **Methods:** A cross-sectional study was conducted among 266 adolescents aged 12–18 years from two Eastern Cape districts using stratified random sampling. Body composition (BMI, waist-to-hip ratio, and body fat

percentage) was assessed through anthropometric measures and bioelectrical impedance. Physical activity was measured using the International Physical Activity Questionnaire, and mental well-being was assessed using the Mental Health Continuum–Short Form. Data were analysed using SPSS v28 with descriptive statistics, Pearson's correlation, and logistic regression. **Results:** While 65.4% of participants had normal BMI, 53% were classified as overfat. The average physical activity exceeded WHO guidelines, with 55.3% of adolescents meeting the recommended levels. A weak but significant inverse relationship was observed between body fat percentage and mental well-being ($r = –0.130$; $p = 0.034$). Body fat percentage was the only significant predictor of mental well-being (OR = 1.068; 95% CI: 1.015–1.124; $p = 0.011$). **Conclusion:** Higher body fat percentage is associated with poorer mental well-being in adolescents. Unlike BMI or waist-to-hip ratio, body fat percentage significantly predicted mental health outcomes. These findings highlight the importance of focusing on adiposity rather than conventional body composition measures such as BMI or waist-to-hip ratio when designing targeted interventions to support both the physical and psychological health of adolescents.
Keywords: Adolescents, body fat, mental well-being

#93. Lower Limb Asymmetry During the Snatch: A Comparison of Malaysian Elite and Junior Weightlifters

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The effectiveness in weightlifting is the combination of the application of force and technique. The apex of this energy transfer occurs during the second pull, as propulsive power is highly critical in this phase. Here, the lifter must overcome gravitational force with maximum effort. This requires balance and an adequate contribution of force from both lower limbs. Any asymmetry in this kinetic output would lead to inefficient force production and eventually produce an inefficient lifting technique. **Purpose:** This study investigated lower limb force production among the Malaysian National Weightlifting athletes during snatch attempts aiming to assess the asymmetry in kinetic output. **Methods:** Six male Malaysian national-level competitive weightlifters voluntarily participated in this study, comprising two groups: elite (n=3, mean age = 26 ± 4.08 years) and junior (n=3, mean age = 22 ± 0.47 years). Participants performed three successful snatch attempts at 90% of their one-repetition maximum (1RM). Bilateral plantar vertical ground reaction force (vGRF) data were collected using wireless instrumented pressure insole system integrated with video. Data were exported in ASCII file and processed using MATLAB R2021a. Parameters extracted included peak force, loading rate, and right-left force distribution across snatch phases. **Results:** There were distinct patterns between the groups. The elite group (EG) exhibited a right foot dominance, with mean force (MF) ranging from 5~7% higher on the right foot across phases, excluding the first pull phase. The asymmetry index (AI) was lowest during the first pull(~2%) and peaked during recovery (~13%). In contrast, the junior group (JG) showed variations across phases with MF ranging from 1~4%. Their lowest AI was during turnover (0%) and peaked during the catch (~9%). **Conclusion:** Elite weightlifters may develop dominant limb for force production, potentially result from adaptation in optimizing their technique at higher loads. In comparison to junior weightlifters, their force production was more balanced. Understanding limb dominance and the asymmetrical pattern could help in developing individualized training intervention that aim to enhance force output efficiency and injury prevention.
Keywords: weightlifting, force distribution, asymmetry

#95. The Effects of Yogurt Consumption on Exercise Performance and Total Body Mass in Prepubertal Children

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Milk contains high-quality protein, not only due to its essential amino acid composition but also because of its excellent digestibility and absorption. Moreover, several studies have reported that fermentation with lactic acid bacteria, as in the production of yogurt, can further enhance digestibility and absorption. However, few studies have thoroughly investigated the effects of yogurt consumption during childhood on growth and development. Additionally, no detailed comparisons exist between yogurt and non-fermented milk. **Purpose:** This study aims to clarify the long-term effects of yogurt consumption, used here as a protein source, on athletic performance and body composition in prepubertal children. Additionally, the study also evaluates its impact on the gut microbiota. **Methods:** A randomized, double-blind, parallel-group controlled trial was conducted involving 44 healthy boys aged 10–12 years who regularly play soccer. Participants were randomly assigned to one of three groups: (1) yogurt protein beverage (YP; 93 kcal, 12 g protein/200 mL), (2) milk protein beverage (MP; 93 kcal, 12 g protein/200 mL), or (3) placebo beverage (PL; 93 kcal, 0 g of protein/200 mL). Each group was instructed to consume its assigned beverage daily for 8 weeks. Performance tests, body measurements, and gut microbiota analyses were conducted before and after the intervention. **Results:** Compared to PL, both YP and MP groups showed significant improvements in 10 - m sprint time based on pre- to post-intervention changes (0.015±0.013, –0.024±0.013, and –0.045±0.015 sec for PL, YP, and MP, respectively). The YP group also exhibited a significantly greater increase in total body mass than PL (0.85±0.19 kg vs. 0.28±0.19 kg). Furthermore, in the YP group, the abundance of Bacteroides massiliensis significantly increased after the intervention, and a positive correlation was observed between the change in Bacteroides massiliensis and the change in total body mass (p = 0.0284). **Conclusion:** Continuous intake of milk protein may contribute to improved exercise performance in prepubertal children. In addition, yogurt consumption may effectively support growth by modulating intestinal microbiota.
Keywords: yogurt, protein, prepubertal children

#98. Rural Revitalization Policy and Physical Activity Inequality Among Elderly: Nationwide Evidence from China

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Purpose: With the implementation of the "Healthy China 2030" and rural revitalization strategies, enhancing elderly health and promoting urban-rural health equity have become crucial policy objectives in China. This study systematically evaluates the net effect and heterogeneity of the 2018 rural sports revitalization policy on physical activity and sports consumption among rural elderly residents. **Methods:** Data were drawn from three national fitness status surveys (2008, 2015, 2020) covering over 90,000 residents aged 60+ across 31 provinces. Each wave used standardized, stratified, multistage sampling; all data were weighted for national representativeness. A Generalized Difference-in-Differences (GDID) model assessed changes in key indicators—including moderate-to-vigorous physical activity (MVPA), sports consumption, exercise habits, and frequency—before and after policy implementation. Analyses were stratified by gender, age, education, and region, with

demographic and socioeconomic factors adjusted in all models. **Results:** The rural elderly showed significant improvements post-policy in MVPA participation (OR=2.12, 95%CI:1.93–2.33, p<0.001), long-term exercise habits (OR=1.61, 95%CI:1.47–1.77, p<0.001), and sports consumption (OR=1.73, 95%CI:1.51–1.99, p<0.001). Weekly exercise frequency and MVPA duration increased substantially. Policy effects were more pronounced among males, the 60–79 age group, and those with lower educational attainment. Regional disparities persisted, with the northeast, south, and southwest seeing the greatest improvements, while north and northwest lagged behind. **Conclusion:** The rural sports revitalization policy has significantly enhanced physical activity and sports consumption among rural elderly, but with clear group and regional heterogeneity. Future rural sports policy should prioritize resource allocation for high-age and low-education groups and weaker regions to further narrow the health equity gap between urban and rural elderly populations.
Keywords: Rural revitalization; Elderly physical activity; Health equity

#101. Track Cycling Modelling can Accurately Simulate Race Efforts

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In track cycling, the 200m sprint time trial (with flying start) is used to rank cyclists in the qualification round and can be considered an important indicator of sprinting ability. The Malaysian track cycling team uses a biomechanical-physiological inspired model to simulate power output of cyclists. **Purpose:** To investigate the similarity between actual measured and simulated power output during the 200m sprint by an elite cyclist. **Methods:** From competition, actual power data during the 200m sprint qualification was collected using an instrumented bicycle crank at 2Hz. The same device provided input values e.g. time-dependent cadence for the model simulation. Additionally, certain characteristics pertaining to the cyclist (e.g. maximum torque, cadence, and power), and the gear ratio were also necessary inputs. The model uses the torque-cadence relationship to calculate an individualized fatigue factor. Then based on the actual cadence measured and accumulation of fatigue, the model estimates maximum power output for every 0.5s interval. **Results:** The model's estimates of power output were highly correlated with the actual power measured, r = 0.97 over a time of 17.5 seconds. The difference may be attributed to neuromuscular fatigue which is not accounted for by the model. **Conclusion:** There is very good similarity between actual measured and simulated power output through modelling. The implication of this type of simulation is to better inform the technical staff about the influence of neuromuscular fatigue, the effectiveness of a particular recovery strategy, the maximal achievable training load, and/or the maximal potential performance.
Keywords: track cycling, 200m sprint, power output, model simulation

#104. The Influence of Relative Age Effects and Biological Maturation on Academy Soccer Coaches' (De)Selection Decisions

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Talent identification (TI) is an essential function of elite youth soccer academies in the UK. Relative Age Effects (RAEs) and biological maturation status are important factors in coaches' decision-making and predictions of future performance. However, a great deal remains unknown about the process of (de)selection in English academy soccer. **Purpose:** The present study investigated coaches' experiences of implementing these phenomena in the (de)selection of academy soccer

players to answer the research question: What is the influence of RAEs and biological maturation on coaches' (de)selection decisions, how is this manifested and what issues does this present to soccer? **Methods:** Semi-structured interviews were conducted with n=12 academy soccer coaches to explore their experiences of (de)selection. Eligible participants met two criteria: (1) a minimum of one year's coaching experience in an academy under the Elite Player Performance Plan (EPPP) system, and (2) possession of at least a UEFA B coaching licence. Data were analysed using reflexive thematic analysis. **Results:** Themes generated included: structural limitations to the application of existing knowledge; the misapplication of previous research findings for different motives; and the consequences of practitioners applying knowledge with incomplete understanding. Participants gave examples including the influence of a club's pathways from the academy to the first team, pressures to select physically dominant youth players, and conflation of RAEs and biological maturation status. **Conclusion:** Current knowledge is being misapplied, used ineffectively, or utilised contrary to common recommendations made in previous research. Improved education is needed to provide practitioners with important knowledge, while researchers must better understand the realities of how RAEs and biological maturation status contribute to the (de)selection process.
Keywords: Talent Identification; Talend Development; Physical Markers

#105. Engagement in Motion: The Role of Virtual Reality and AI in Shaping User Experiences

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Purpose: This narrative review synthesizes recent evidence on the integration of Virtual Reality (VR) and Artificial Intelligence (AI) in exercise and sport science. It examines how these technologies enhance motor learning, rehabilitation, psychological conditioning, and performance optimization, with particular attention to user engagement and branded athletic experiences in immersive environments. **Methods:** A narrative review of peer-reviewed studies published between 2015 and 2025 was conducted using 60+ articles. The studies encompass VR and AI applications in domains such as immersive sport training environments, cognitive-motor rehabilitation, user acceptance, flow states, sensor-based feedback systems, and AI-enhanced personalization. **Results:** VR applications have been shown to support motor learning and psychological engagement by offering immersive simulations and real-time feedback. Flow states and motivational enhancement were observed in interactive VR scenarios. AI technologies enable injury prediction, movement optimization, and individualized exercise coaching using wearable devices and deep learning models. Studies also highlight challenges in user acceptance, cybersickness, and accessibility, especially among older adults. **Conclusion:** The interdisciplinary application of VR and AI in sport science demonstrates strong potential to personalize training, accelerate motor recovery, and optimize psychological outcomes. These technologies are also pivotal in crafting compelling sport experiences and enhancing brand engagement, especially as sport organizations increasingly seek to innovate athlete and fan interaction. Future efforts must address usability, technological literacy, and ethical implementation to ensure broad and equitable integration into practice.
Keywords: Virtual Reality, Artificial Intelligence, Sport Branding

#110. Poor Appetite Predicts Incident Muscle Weakness and Disability: A Multi-Country Longitudinal Study of European Older Adults

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Poor appetite, often termed anorexia of ageing, may serve as an early marker of adverse health outcomes in old age. **Purpose:** This study aimed to evaluate whether poor appetite predicts incident low handgrip strength (HGS), physical disabilities, and reduced quality of life (QoL) in older adults across Europe. **Methods:** Data were drawn from waves 5–9 of the Survey of Health, Ageing and Retirement in Europe (SHARE), including individuals aged 50+. Appetite status was assessed at baseline (2013), and outcomes were tracked longitudinally. Incident low HGS (EWGSOP2 criteria), difficulty rising from a chair, climbing stairs, dressing, and low QoL (CASP-12 ≤29) were analyzed using logistic regression, adjusting for age, sex, and country. **Results:** Poor appetite at baseline was a strong predictor of adverse outcomes. Among older adults (66+), poor appetite increased the odds of low HGS (OR=13.03), difficulty dressing (OR=5.91), and low QoL (OR=5.62). Women with poor appetite had higher odds of difficulty climbing stairs (OR=7.44) and dressing (OR=5.55), while men were more prone to low HGS and chair-rise difficulty. The compounded effect of poor appetite, older age, and female gender was particularly pronounced. Incidence rates of all outcomes were nearly doubled in those with poor appetite compared to those with good appetite. **Conclusion:** Poor appetite is a robust, independent predictor of future muscle weakness, physical disability, and reduced QoL. Routine appetite assessment may help identify at-risk individuals and guide early interventions in ageing populations.
Keywords: Appetite loss, Physical disability, Ageing

#111. Unlocking Mobility: The Effect of Yogasanas on Joint Flexibility Among Collegiate Students

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The present study examined the impact of selected yogasanas on the flexibility of major joints among collegiate students, aiming to highlight yoga as an effective tool for enhancing physical fitness and musculoskeletal health. **Purpose:** The primary objective was to determine whether regular yogasana practice significantly improves joint flexibility compared to conventional physical activities. **Methods:** A total of 60 collegiate students (aged 18–22 years) were randomly assigned into two groups: an experimental group (n=30) that practiced yogasanas (Surya Namaskar, Bhujangasana, Paschimottanasana, Trikonasana, and Vajrasana) for 12 weeks, 5 days per week, 45 minutes per session, and a control group (n=30) that continued their routine college activities. Flexibility was assessed using standardized tests: Sit and Reach Test for spinal and hamstring flexibility, Shoulder Flexibility Test, and Hip Flexion Range Test. Data were analyzed using paired and independent sample ***t***-tests at 0.05 level of significance. **Results:** The experimental group showed a significant improvement in flexibility across all joints ($p<0.05$), with mean Sit and Reach scores increasing from 19.3±3.5 cm to 27.6±4.1 cm ($t = 8.42$, $p = 0.001$). Shoulder flexibility improved from 14.8±2.9 cm to 20.1±3.3 cm ($t = 7.11$, $p = 0.000$), and hip flexion range increased from 61.2°±5.4° to 73.7°±6.2° ($t = 9.03$, $p = 0.000$). In contrast, the control group demonstrated no significant change ($p>0.05$). Effect size analysis indicated a large effect (Cohen's $d > 0.8$) for all flexibility measures in the experimental group. **Conclusion:** The findings support that systematic yogasana practice is a powerful non-invasive intervention to enhance joint flexibility among collegiate students, promoting better posture, reduced risk of musculoskeletal disorders, and improved athletic performance. These results underscore the importance of integrating yoga into academic institutions' fitness curricula for holistic development.
Keywords: Yogasanas, Flexibility, Collegiate Students, Joint Mobility, Physical Fitness, Yoga Intervention.

#112. Psychological Resilience and Physical Fitness Synergy: A Position-Specific Analysis of Performance in Competitive Volleyball Players

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Purpose: Volleyball is a dynamic team sport where performance is determined not only by technical proficiency but also by the interaction of psychological and physical fitness factors. This study aimed to examine the combined effect of psychological parameters (self-confidence, achievement motivation, and competitive anxiety) and physical fitness components (agility, strength, explosive power, and endurance) on the performance of volleyball players across different playing positions—setters, attackers, blockers, and liberos. **Methods:** A total of 42 male volleyball players (mean age = 20.8 ± 2.6 years) competing at intercollegiate and state levels were assessed. Psychological measures included the Sports Achievement Motivation Questionnaire and Competitive State Anxiety Inventory-2. Physical fitness tests comprised Illinois Agility Test, Vertical Jump Test, 30m Sprint, and Yo-Yo Intermittent Recovery Test. Performance ratings were derived from expert coaches' evaluation and match statistics. Data were analyzed using two-way ANOVA (position × parameters), followed by Pearson's correlation and multiple regression analysis to determine predictors of performance. **Results:** Findings revealed significant differences across playing positions ($p < 0.05$). Attackers showed the highest explosive power (mean VJ = 57.3 ± 4.1 cm, $p=0.032$), while setters exhibited superior agility (Illinois Agility Test = 15.6 ± 0.8 sec, $p=0.041$). Liberos demonstrated greater endurance capacity (Yo-Yo IR1 = 1410 ± 125 m, $p=0.027$). Psychological parameters indicated that self-confidence strongly correlated with performance in setters ($r = 0.62$, $p = 0.01$), whereas achievement motivation was more critical for attackers ($r = 0.58$, $p = 0.02$). Regression analysis showed that a combination of explosive power and self-confidence explained 46% of variance in performance ($R^2 = 0.46$, $p < 0.01$). **Conclusion:** The study highlights that volleyball performance is highly position-specific, influenced by distinct psychological and physical fitness parameters. Coaches should design integrated training models that balance physical conditioning with psychological skill development tailored to each playing role, thereby optimizing overall team efficiency.
Keywords: Volleyball, Physical Fitness, Psychological parameters, Performance

#115. Public Welfare of Sports Social Organizations Aids Sports in Western Ethnic Minority Areas, China

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Against the backdrop of the national fitness campaign and the rural sports revitalization strategy, examining how a basketball club has provided sustained support to a village in Gannan Prefecture for nine years offers valuable insights into how sports social organizations can contribute to the development of sports in western regions with ethnic minorities. **Purpose:** Leveraging the plateau's natural landscapes and distinctive sports resources, developing new tourism formats such as sightseeing experiences and event-based travel. This approach attracts external visitors, revitalizes rural economies, and facilitates a sustainable transition from "sports-based assistance" to "industrial self-reliance." Consequently, it provides a new development model for rural revitalization in ethnic regions. **Methods:** Field research was conducted to collect and analyse detailed data using social capital theory. Since 2017, regular donations of sports equipment and cash have been made to create one of the most beautiful courts in the plateau region. High-level basketball tournaments have been

hosted and professional referees have been trained, enhancing the physical fitness and athletic skills of local youth. **Results:** Organize Sino-Tibetan and county-level basketball matches, and run referee training courses to nurture local talent. Organize college student volunteers to deliver holiday courses and invest over 60,000 yuan in student aid funds to support disadvantaged groups. The social benefits have improved, as have the local sports and educational conditions. It has promoted the integration of Chinese and Tibetan cultures and facilitated the construction of the Mutual Assistance Happy Home in Nagar Village, Yiwa Town. In economic terms, the stadium creates a distinctive landscape, stimulates tourism, and gives rise to accommodation, catering, and other facilities, attracting investment to improve infrastructure. **Conclusion:** This practice confirms that, in order to promote public welfare through sport, it is necessary to accurately identify needs, establish long-term mechanisms. It is also important to provide a explicable experience to promote the development of sport in remote ethnic minority areas.
Keywords: sports social organizations, sports public welfare, ethnic minority areas

#116. The Effects of Exercise and Psychoeducation on the Psychological Health of Adolescents at Risk for Non-Communicable Diseases

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Purpose: The study aimed to determine the effect of an exercise program and a psychoeducation program on the mental health and well-being of adolescents at risk for non-communicable diseases (NCDs). This research forms part of a broader study exploring physical and psychological risk factors among adolescents at risk for NCDs. **Methods:** A random sample of 75 adolescents was selected from seven schools in two districts of the Eastern Cape, South Africa, drawn from a larger pool of 266 adolescents identified as being at risk for NCDs. Participants were randomly assigned to an experimental group (mean age = 14.69) or a control group (mean age = 15.09). The experimental group completed a 2-week structured exercise program followed by a 2-week psychoeducation program. Psychological distress was assessed using the Kessler Psychological Distress Scale (K-10), while well-being was measured with the Mental Health Continuum – Short Form. A pre-test, post-test with control group design was employed, with a six-month follow-up test. **Results:** The distribution of participants with metabolic risk was 48.5% in the experimental group and 42.9% in the control group. Repeated measures ANOVA revealed a significant ($p < 0.05$) main effect and interaction effect of the intervention for both outcomes: psychological distress decreased significantly, and well-being increased in the experimental group compared to the control group. Follow-up testing showed that the positive effects of the intervention were partially maintained at six months for most participants. **Conclusion:** The findings suggest that continuous engagement in exercise and psychoeducation programs positively impacts the psychological health and well-being of adolescents at risk for NCDs. Implementing such interventions in schools may provide a sustainable strategy for improving adolescent mental health while addressing risk for NCDs.
Key words: Mental health, Well-being, non-communicable disease

#119. Physical Education Motivation among Primary School Students

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Physical education in schools aims to enhance students' physical fitness and encourage increased levels of physical activity. Students' motivation toward physical activity plays a crucial role in their

participation and performance, being influenced by both internal and external factors. **Purpose:** The study aimed to examine the motivation among primary school students towards Physical Education. **Methods:** A total of 302 participants (158 males, 144 females) aged 10 to 12 years old (1.95 ± 0.80) were involved in this study. The Physical Education Motivation Scale (PEMS) was utilised. The PEMS consists of 9 items which are subdivided into three 3-items subscales measuring intrinsic motivation, extrinsic motivation and amotivation. Descriptive analysis, independent t-test and one-way ANOVA were used. **Results:** The independent samples t-test revealed that there was significant difference between gender in intrinsic motivation, $t(286.589) = -2.339$, $p = .020$, external motivation, $t(180.518) = 7.375$, $p < .001$, and lack of motivation, $t(300) = 3.473$, $p < .001$. Besides, the one-way ANOVA showed that no significant difference between the three age groups in intrinsic motivation, $p = .140$, external motivation, $p = .228$, and lack of motivation, $p = .070$. Furthermore, there was significant difference between ethnicity in intrinsic motivation, $F = 10.208$, $p < .001$, external motivation, $F = 23.249$, $p < .001$, and lack of motivation, $F = 7.860$, $p < .001$. **Conclusion:** These findings suggest that gender and ethnicity are important factors influencing motivation in primary school physical education. Whereas, age does not appear to have a significant effect. These findings highlight the importance of considering demographic factors when designing interventions to enhance motivation in physical education.
Keywords: physical education, motivation, primary school students

Poster Presentations

#1. Smart Ice Arenas: A New Frontier for Promoting National Health

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With General Secretary Xi Jinping's call for "300 million people to participate in ice and snow sports," China's ice and snow industry is booming. The government has formulated plans to promote these sports, integrating national fitness with health, such as the Ice and Snow Sports Development Plan (2016-2025) etc. Modern ice and snow venues are essential for public participation and industry upgrading, with intelligent construction enhancing safety, comfort, and efficiency. **Purpose:** This research explores how intelligent technologies can enhance ice and snow venues by optimizing sports experiences, and promoting health benefits. It also offers optimization suggestions to support the sustainable development of these venues and national health promotion. **Methods:** Use literature research method, case analysis method and field investigation method. **Results:** This paper explores how AI and intelligent systems enhance the safety and convenience of ice and snow venues. They enable immersive environments, real-time safety monitoring, year-round sports via simulation, and inclusive access through wearable devices, intelligent prosthetics, VR teaching, etc., benefiting the elderly, disabled, and novices. However, issues like inadequate rural network coverage, uneven resource distribution, elderly's difficulty with smart tech, disabled's equipment barriers, teenagers' increased screen time, and misleading "quick success" claims exist. Countermeasures include equipping AR systems with auxiliary devices, developing disabled-specific equipment, retaining manual services, grading venues by health benefits, and strengthening venue-hospital cooperation to promote public health through intelligent ice and snow sports. **Conclusion:** The intelligent development of ice and snow venues enhances public participation, nurtures talent, and promotes health. While these venues boost engagement and improve user experiences, they also carry risks such as technological alienation and health equity challenges. To advance, stronger policy guidance, increased R&D investment, and a nationwide network of smart venues are essential. This will support national fitness goals and contribute to a Healthy China, ensuring a balance between efficiency and equitable health outcomes.
Keywords: Smart; Ice Arenas; National health

#5. Mechanism of Post-Exercise Muscle Soreness

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Muscle soreness after exercise, especially delayed onset muscle soreness (DOMS), is a common phenomenon after new or intense exercise. This review explores the physiological mechanisms of DOMS. **Purpose:** Synthesize the current etiology of DOMS and to introduce recovery strategies. The hypothesis proposes that delayed muscle soreness is caused by exercise-induced microdamage to muscle fibers and connective tissue, triggering local inflammation. **Methods:** The analysis integrated data from muscle biopsy analysis (Ultrastructural damage was quantified via electron microscopy in studies comparing eccentric vs. concentric exercise, with biopsies taken 24–48 hours post-exercise), biomarker analysis (Blood samples were collected at 0h, 24h, 48h, and 72h post-exercise to measure inflammatory cytokines (TNF-α) via ELISA, oxidative stress markers via spectrophotometry, and creatine kinase (CK) levels as a proxy for muscle damage), and pain perception surveys (DOMS severity was assessed using a 10-point visual analog scale (VAS) in controlled trials (n=200+ participants), with pain peaks correlated to biomarker levels). **Results:** Markers of oxidative stress (e.g., protein oxidation) were proportional to exercise intensity(Lipid peroxidation levels increased by

15–35% after high-intensity eccentric exercise, measured via thiobarbituric acid-reactive substances (TBARS) assay), while anti-inflammatory interventions reduced pain severity by 20-40%. Notably, performing the same exercise over and over again can reduce symptoms of DOMS in subsequent exercises due to neural adaptation and extracellular matrix remodeling (Participants performing the same eccentric exercise protocol (e.g., downhill running) reported 40–60% less DOMS in subsequent sessions, supported by reduced CK release and neutrophil infiltration). **Conclusion:** In short, DOMS is multifactorial, including mechanical damage, inflammation, and neurosensitization. Recovery strategies include ice for 10 minutes after training and heat for 48 hours. The next day, do a 20-minute brisk walk/swim. Take 20g whey protein + banana within 30 minutes after exercise and take a daily magnesium + vitamin D supplement.
Keywords: DOMS, Eccentric Exercise, Inflammatory Response

#7. Theoretical Research and Practical Exploration on the Construction of China's Aviation Sports Service Complexes

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The construction of aviation sports service complexes, as a new business format integrating the comprehensive development of aviation flight camps with residential areas, culture, entertainment, tourist attractions, etc., is of great significance for promoting regional economic development, enhancing urban images, and meeting people's diverse needs. At the same time, China's current policy orientation clearly indicates that in the new era, for the high - quality and innovative development of the sports industry, it is necessary to rely on the important approach of industrial integration. **Purpose:** By exploring the construction of aviation sports service complexes in China may summarize their internal laws and deficiencies, thus put forward suggestions and give reference to improving evaluation for other regions. **Methods:** Literature research method, case analysis method, field investigation method. **Results:** Although aviation sports service complexes have been launched or completed in various parts of China, there are still many problems, including the following: (1) Immature operation and management models; (2) Insufficient preliminary planning, making it difficult to proceed smoothly in the later stage; (3) Deviations in market perception; (4) Incomplete talent cultivation. **Conclusions:** Based on the problems found in the research, the following suggestions are put forward：(1) First, adhere to the integrated development of multiple business forms and create characteristic sports consumption scenarios.(2) Conduct reasonable planning and layout, and effectively integrate with local cultural or tourism characteristics to make industrial integration more effective and the aviation sports service complex more comprehensive and reasonable.(3) Vigorously promote the publicity of aviation sports, actively reverse the public's consumption perception bias towards aviation sports, and at the same time ensure visible safety for consumers to meet their safety psychological thresholds.(4) Attention should be paid to the scale and level of talent cultivation, which can ensure more practical opportunities to strengthen students' innovation abilities.
Keywords: aviation sports,aviation sports service complexes,industrial integration

#8. Digitalization empowers the precise governance of community sports: the value of the era, governance obstacles and optimization paths

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Digital technology is now integrating into the community sports governance system with unprecedented strength, injecting powerful momentum to address traditional governance challenges and enhance governance efficiency. Focusing on obstacles highlighted in the process of community sports governance, this paper proposes optimization paths aimed at providing effective recommendations for precise community sports governance in a digital society. **Purpose**: This study analyzes the obstacles faced by the current digital empowerment of community sports precision governance, provides theoretical support for it, and helps the innovation and reform of community sports digital governance. **Methods:** The combination of case analysis and theoretical exposition. **Results:**(1) Era value: With the help of big data and professional management system, it can accurately optimize resource allocation, improve governance efficiency, promote the integration of community sports and sports industry, and facilitate the construction of smart city.(2) Governance obstacles: Some community managers are bound by traditional management thinking and have low acceptance of digital governance. Moreover, there is a lack of effective coordination mechanism at present. Secondly, some community sports platforms have loopholes in security protection measures. (3) Optimize the path: The government should increase investment in the construction of digital infrastructure in old communities and promote network upgrading. In addition, a multi-party participation mechanism for community sports collaborative governance should be established and a sound data security management system should be formulated and improved. **Conclusion:** Digitalization enables the precise governance of community sports, which is of great significance. Although faced with various obstacles, the two can be deeply integrated through the above measures to improve the level of precise governance and promote the development of community sports. Continuous attention and research are still needed in the future.
Keywords: digital empowerment; community sports; precision

#9. Community sports governance community: value orientation, practical dilemma and path building

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The community is the basic unit of social governance and an important vehicle for reshaping social relationships. To promote community sports governance, it is necessary to update concepts and strengthen organizational development. Based on this, this study proposes the concept of building a community sports governance community based on the idea of a social governance community. It elucidates its value orientation, explores the challenges and construction paths, and provides a reference for optimizing community sports governance. **Purpose:** This paper aims to systematically analyze the current situation and challenges of community sports governance, and put forward feasible construction paths to improve the effectiveness of community sports governance and residents' participation. **Methods:** the research method combining literature research and case analysis. **Results:**(1) Value orientation: The value orientation of community sports governance community is reflected in three aspects: the universality of governance subjects, the effectiveness of governance ability and the sharing of governance effectiveness. (2) Practical difficulties: China's community sports governance is faced with multiple difficulties such as the failure of the primary responsibility of grass-roots governments. (3) Path construction: In view of the difficulties, this paper puts forward specific construction paths such as strengthening the main responsibility of grass-roots governments and strengthening democratic consultation among multiple subjects. **Conclusion:** This article points out that to build an effective community sports governance system, it is necessary to strengthen the primary responsibility of local governments, enhance democratic consultations among multiple stakeholders, and mobilize social forces and public participation. Implementing these measures can promote the scientific, democratic, and legal governance of community sports, meet residents' diverse sports needs, and provide strong support for the "Healthy China" strategy.

Keywords: community sports; sports governance; governance community; national fitness

#10. Research on Winter Training Load Characteristics of Elite Male High Jumpers in Jiangsu Province, China

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The Jiangsu Provincial Men's High Jump Team was established in September 2020 as a joint initiative between the Jiangsu Provincial Sports Bureau and the Changzhou Municipal Sports Bureau. Through nearly four years of dedicated efforts, the team has achieved notable results. In early 2021, athlete Wang Zhen cleared 2.24m, followed by a 2.28m jump to win the Yangtze River Delta Championships. At the 14th National Games of the People's Republic of China in Shaanxi (September 2021), Wang secured the gold medal with 2.24m. By 2023, Wang Zhen further elevated the team's standing by clearing 2.32m (PB) at the China Athletics Tour· Nanjing Leg, qualifying for the Budapest World Championships. Despite these successes, only Wang Zhen has surpassed 2.30m, highlighting significant gaps in training methodologies compared to national elite standards, particularly in performance consistency, technical stability, and developmental disparities among teammates. **Purpose:** This study investigates the training models, winter training protocols, and daily routines of four Jiangsu male high jump athletes. By integrating theoretical frameworks, it aims to identify causes of performance instability, propose targeted solutions to optimize training plans, and enhance overall competitive standards. **Methods:** Literature review: Expert interviews； On-site observation； Statistical analysis. **Result:** Wang Zhen Weeks 1–10: Focus on speed-strength training with progressive load increases. Weeks 11–15: Shift to technical drills and pre-competition tapering (reduced volume/intensity). Injury prevention strategies included individualized load adjustments. Dong ZiAng Speed-Amplitude Technical Type: Peak load intensity reached by Week 7, followed by technical imitation training (Weeks 8–15).Emphasis on reinforcing speed qualities and kinematic chain efficiency. **Conclusions:** Training Focus: Winter training prioritized auxiliary technical exercises, special capacity development, and full-technique integration, reflecting Coach Huang's emphasis on foundational preparation. Load Management: Conservative training loads suggest potential for strategic increases to stimulate physiological adaptation. Technical Progression: Wave-like increases in technical training indicate systematic skill development.
Keywords: peak load, physiological adaptations, injury prevention

#14. The Role of Mindfulness in Enhancing Exercise Persistence Among Adolescents: Mediating Effects of Personal Growth Initiative and Implementation Intention

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Mindfulness emerged as an effective strategy to stimulate intrinsic motivation for exercise and enhance sports persistence among adolescents, making it a critical focus in school sports and health psychology. **Objective:** This study aimed to explore the impact of mindfulness levels on adolescents' exercise persistence, examining the roles of personal growth initiative and implementation intention as mediating factors. **Methods**: A structural equation model was employed to investigate the mediating effects of personal growth initiative and implementation intention on the relationship between mindfulness and exercise persistence. **Results:** Statistical analysis showed that the correlation coefficient between mindfulness and exercise persistence ($r = 0.356^{**}$, $p < 0.01$) was positively correlated. The correlation coefficient between mindfulness and personal growth

initiative ($r = 0.362^{**}$, $p < 0.01$) and the correlation coefficient between mindfulness and implementation intention ($r = 0.459^{**}$, $p < 0.01$) were significantly positively correlated. The correlation coefficient between exercise persistence and personal growth initiative ($r = 0.409^{**}$, $p < 0.01$) and the correlation coefficient between exercise persistence and implementation intention ($r = 0.363^{**}$, $p < 0.01$) were also significantly positively correlated. The results indicated that the total effect of mindfulness on exercise persistence was 14.371, and the 95% confidence interval of the mediating effect of personal growth initiative and implementation intention did not contain 0 (LLCL = 11.245, ULCL = 17.497), highlighting that the total effect of mindfulness on exercise persistence and the mediating effect of the two variables were significant. The study confirmed that higher levels of mindfulness in adolescents could predict their exercise persistence, which underscored the importance of cultivating mindfulness in enhancing physical exercise commitment. **Conclusion:** This study revealed the vital role of mindfulness in promoting exercise persistence among adolescents. By comprehending the intricate relationships among the four, targeted mindfulness training interventions could be developed to foster lifelong healthy habits in adolescents.
Keywords: mindfulness level, physical exercise, adolescent health.

#18. Governance Mechanism for Accessibility of Rural Public Sports Services in China

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Currently, rural public sports services remain a weak link in China's overall public sports service system. **Purpose:** The goal is to address the contradiction between the people's growing needs for a better life and unbalanced, inadequate development in the new era. The development of sports activities relies on material foundations. Surveys indicate that in most rural areas of China, the supply of sports venues and fitness equipment fails to meet the needs of rural residents for physical activities. The provision of sports facilities and equipment is the core of rural public sports service delivery. From the perspective of service provision by rural sports organizations, most rural areas have yet to establish fitness organizations capable of improving the organizational service level of sports activities. **Methods:** Develop specialized development plans at the city, county, town, and village levels to clarify objectives for building higher-quality rural public sports services. Accelerate post-pandemic recovery efforts for key services, focusing on expanding the coverage of rural public sports services across different regions. **Results:** In the evaluation of rural public sports service outcomes, Delphi results for assessment domains and indicators showed that the average score for all 19 evaluation indicators exceeded 3.0. **Conclusion:** In the implementation of governance mechanisms for improving the accessibility of rural public sports services, governments at all levels should adhere to a "people-oriented, agriculture-first" approach to rural social sports development.
Keywords: National Fitness, Rural Public Sports Services，Accessibility Governance

#19. How Sports Show Narratives Differ Between China and Korea: Impacts on Fitness Motivation

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Purpose: This study aims to explore the differences in sports show narratives between China and Korea and their impacts on fitness motivation. By understanding these differences, we hope to provide insights into how sports media in these two countries influence people's attitudes and behaviors towards fitness. **Methods**: Qualitative data were collected through in-depth interviews with 30 sports enthusiasts from China and Korea, respectively, to understand their perceptions of sports

show narratives. The survey included questions on intrinsic and extrinsic motivation, using the Motives for Physical Activity Measure-Revised (MPAM-R) and the Sport Motivation Scale (SMS). Data were analyzed using thematic analysis for qualitative data and multiple regression analysis for quantitative data. **Results:** The qualitative analysis revealed that Chinese sports shows tend to emphasize collective achievements, national pride, and the spirit of perseverance, while Korean sports shows focus more on individual success stories, personal transformation, and the emotional aspects of athletes' lives. The quantitative results showed that intrinsic motivation (e.g., enjoyment, competence) was significantly higher among Chinese participants, whereas extrinsic motivation (e.g., appearance, social recognition) was more prominent among Korean participants. The regression analysis indicated that the type of sports show narrative significantly predicted fitness motivation, with Chinese narratives having a stronger positive impact on intrinsic motivation and Korean narratives on extrinsic motivation. **Conclusion:** The study concludes that sports show narratives in China and Korea have distinct characteristics that influence fitness motivation differently. Chinese narratives, with their focus on collective values and perseverance, tend to enhance intrinsic motivation, while Korean narratives, highlighting individual success and emotional stories, boost extrinsic motivation. These findings suggest that sports media can play a crucial role in shaping fitness motivation by tailoring their narratives to align with cultural values and audience preferences.
Keywords: Sports show narratives, Fitness motivation, Cultural differences

#20. Rethinking Badminton competitions: The Influence and Application of Innovative Competition System for Enhanced Mass Badminton Engagement

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Badminton has gained considerable popularity, leading to an increase in participation rates. However, the traditional single elimination format is inadequate in fulfilling the growing demand for engaging and enjoyable experiences. Consequently, the development of an innovative competition system for mass badminton is gaining interest to enhance participant satisfaction and address the sport's evolving requirements. **Method:** This study adopts a mixed-methods approach, employing both questionnaire surveys and expert interviews. A comprehensive questionnaire was designed to investigate various dimensions of the innovative competition system in mass badminton. **Results:** The findings indicated a marked increase in participation numbers in badminton competitions. However, many participants encounter difficulties in grasping the new rules and mechanics associated with this innovative competition format, leading to results that differ significantly from those of traditional competitions. Additionally, the incorporation of digital platforms has improved organisational efficiency, allowing for enhanced transparency through electronic data displays. **Conclusion:** The implementation of an innovative competition system has significant implications for the sport, fostering greater participant engagement and satisfaction. The challenges faced by new entrants underscore the necessity for effective communication and educational initiatives regarding the updated rules and competition structures. The evolution of the public badminton competition system is gaining interest for promoting the sport's advancement while enriching participant experiences. This study offers valuable theoretical and practical insights for improving the framework of public badminton competitions.
Keywords: Badminton; Participant engagement; Digital platforms; Organisational efficiency; Innovative competition system

#22. Influence of Physical Education Teachers' Autonomy Support on Adolescent Engagement in Volleyball

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Adolescence is a important stage for physical, psychological, and social development. Sports activities, particularly volleyball, provide numerous benefits for adolescents' overall growth and healthy lifestyles. In physical education, teachers play a pivotal role, where perceived autonomy-supportive teaching positively influences adolescents' intrinsic motivation to engage in sports. **Purpose:** This study investigates the impact of physical education (PE) teachers' autonomy support on adolescent engagement in volleyball, specifically examining the relationships among autonomy support, autonomous motivation, sports confidence, and sports engagement. **Method:** A questionnaire survey was administered to 350 adolescents participating in volleyball to assess the relationship between PE teachers' autonomy support, autonomous motivation, sports confidence, and engagement levels. **Results:** The findings showed significant inter-correlations between PE teachers' autonomy support, autonomous motivation, sports confidence, and volleyball engagement. The study revealed that PE teachers' autonomy support is a strong predictor of adolescents' volleyball involvement and highlights how both autonomous motivation and sports confidence independently and sequentially influence engagement. **Conclusion:** The findings highlight the crucial role of PE teachers' autonomy support in fostering adolescents' sports engagement. Understanding the interactions among autonomy support, motivation, confidence, and engagement can inform the development of targeted interventions aimed at enhancing adolescents' participation in volleyball and promoting lifelong healthy habits.
Keywords: autonomy support, autonomous motivation, sports confidence, volleyball engagement, physical education.

#24. Factors and Pathways for Exercise Snacks Participation in Sedentary Populations under the Socio-Ecological Perspective

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The modern sedentary lifestyle has become a global public health challenge. Sitting for more than 6 hours per day can increase all-cause mortality by 20% and cardiovascular risk by 147%. As a flexible form of physical activity, exercise snacks (ES)—brief bouts of movement such as 2 minutes of activity per hour—can improve blood flow velocity by 37% and effectively reduce the harms of prolonged sitting. However, participation in ES is influenced by multiple factors, including individual awareness and the social environment, requiring a systematic analysis based on the socio-ecological model. **Purpose:** This study, from a socio-ecological perspective, analyzes the factors influencing sedentary individuals' participation in ES across five levels: individual, interpersonal, organizational, community, and policy. It aims to explore promotion strategies to enhance public health. **Methods:** This study searched Chinese and English databases for literature from 2015 to 2025, focusing on sedentary behavior, exercise snacks, and social ecology. It included empirical studies with sample sizes over 300, sedentary time ≥6 hours, and intervention follow-up data, while excluding studies related to traditional exercise. **Results:** Factors influencing ES participation. (1) Individual: limited health awareness, poor time management, impact of chronic diseases; (2) Interpersonal: lack of social role models, insufficient support from family and peers; (3) Organizational: restrictive office environments, prevailing sedentary culture; (4) Community: inadequate facilities, unreasonable facility access hours; (5) Policy: lack of ES promotion, public

misconceptions. **Conclusion:** Strategies to promote ES participation. (1) Individual: health education, wearable device monitoring, micro-habit formation; (2) Interpersonal: mutual support from family and peers, professional guidance; (3) Organizational: optimizing office spaces, establishing activity policies; (4) Community: improving exercise facilities, organizing low-threshold activities; (5) Policy: incorporating ES into health guidelines, science communication via new media.
Keywords: social ecology, sedentary population, exercise snacks

#28. Research on Digital Embedding of Party Building to Guide Community Elderly Sports Participation

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China's urbanization has intensified health and sports demands among urban elderly populations. Traditional community sports services struggle with low participation (due to inadequate facilities and fragmented organization) and unequal resource distribution. Digital technologies (IoT, big data, AI) integrated with grassroots Party-building offer transformative potential. **Purpose:** This study proposes a "Party-building + digital governance" framework to optimize elderly sports services by addressing: (1) digital empowerment of grassroots Party resource integration; (2) multi-stakeholder collaboration in Party-led governance; (3) technology-driven personalized service delivery. **Methods:** Literature review on digital governance and elderly sports. Surveys (n=500+ elderly) on sports participation and digital use. Interviews (n=30 stakeholders).Case studies of 3 smart community platforms. Data analyzed via SPSS, Python, and SNA. **Results:** Digital Exclusion: Elderly smart device adoption remains below 50%, hindered by complex interfaces (60% struggle) and insufficient training (70% report no guidance).Party-building Efficacy: "Party member + elderly" mentoring increased digital engagement by 42%; integrated platforms boosted facility utilization by 60% and reduced service response times to <24 hours. Impact & Limitations: Weekly exercise duration rose from 1.2 to 2.5 hours, yet 80% of platforms lacked social features, causing 45% user attrition within 30 days. Root Causes: Fragmented governance coordination, technology-design misalignment with elderly needs, and inadequate evaluation metrics. **Conclusion:** Digital-Party-building integration effectively addresses elderly sports inequities. Prioritizing user-centric design, cross-sector collaboration, and social connectivity can enhance service sustainability and healthy aging.
Keywords: Digital governance, Elderly sports participation, Digital divide

#29. Analysis on the Value and Promotion Path of Flag Football in Colleges and Universities

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With college students being the key target group for the implementation of the National Fitness Program. Therefore, coordinating university sports and public fitness is crucial. In 2023, at the 141st meeting of the International Olympic Committee, flag football was officially included as an official event for the 2028 Los Angeles Summer Olympics. This study proposes paths to promote the development of flag football in universities, enriching the methods of public fitness in China and meeting the diverse fitness needs of the people. **Purpose**: To analyze and find out the reasonable ways to expand the popularity of flag football in China. **Methods**: 1.Organize literature to summarize and conclude the value of flag football in "National Fitness." 2.Understand the current status of flag football in universities. **Results**: 1. Development (1) This sport is not well-known among students in domestic universities. Most surveyed college students are unfamiliar with flag football but show some interest. (2) Universities allocate less funding and space for flag football, leading to insufficient

equipment and a lack of support 2. Value (1) The rules are simple, combining fun and safety, making it a safe "non-contact" sport. (2) This sport not only promotes personal athletic development but also requires good observational skills, teamwork, and the integration and enhancement of both individual and team abilities. 3. Promotion Paths (1) Increase publicity for flag football through various online platforms like TikTok and Xiaohongshu to deepen public understanding and improve the competition system. (2) Offer elective courses on flag football at universities to build a talent pool for future university leagues and even national or Asian competitions. **Conclusion:** The inclusion of flag football in the Olympics presents both new opportunities and challenges. Introducing flag football into universities and increasing its promotion can not only improve physical fitness among students and even faculty but also foster character development, aligning with the needs of university sports reform and the national fitness program.
Keywords: flag football, university sports, students

#30. Exploration of Diverse Paths for School Physical Education Reform: Driven by Digital Intelligence and Breaking through Dilemmas

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Purpose: To explore the role of digital intelligence in school physical education reform, break through the dilemmas faced in school physical education reform, such as the ineffective traditional teaching mode and uneven distribution of physical education resources, promote the high - quality development of school physical education, and improve students' physical health and comprehensive literacy. **Methods:** This paper uses research methods such as the literature review method, interview method, logical analysis method, field investigation method, and observation method. **Results:** School physical education reform faces problems such as the difficulty of the traditional teaching mode in stimulating students' interest and the uneven distribution of physical education resources. Although digital intelligence technology can bring new opportunities to school physical education reform, such as using accurately monitored data to facilitate personalized teaching and creating virtual scenarios to enrich teaching content, there are also issues like high technical costs, insufficient teacher proficiency, and data security and privacy protection. **Conclusion:** To promote school physical education reform, the government should increase capital investment and introduce incentive policies; schools need to strengthen teachers' training in digital intelligence technology and data security management; and inter - school cooperation should be enhanced to share resources and experiences. A comprehensive and multi - level reform promotion system should be constructed to give full play to the effectiveness of digital intelligence and achieve the high - quality development of school physical education.
Keywords: Digitalization,School Physical Education, Reform

#31. Analysis and Governance of the "Fan Circle" Phenomenon in Sports

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Purpose: In recent years, the “sports fan circles” phenomenon has spread rapidly in the Chinese sports community. Extreme behaviors such as cyberbullying, privacy violations, and competition disruptions have seriously affected athletes’ physical and mental health and social order. This study aims to explore the causes, characteristics, and negative impacts of this phenomenon and propose governance strategies based on practical interventions to provide theoretical insights for fostering a healthy sports culture. **Methods:** Case analysis of typical events like the Table Tennis Asian Cup

was conducted to examine the destructive impact of extreme fan behaviors on athletes and competitions. An analysis of the 2025 Cyberspace Administration's special operation data assessed the effectiveness of governance measures. Expert interviews and literature reviews integrated legal and sociological perspectives, such as the "whole - chain crackdown" strategy proposed by Zhao Jingwu from Beijing University of Aeronautics and Astronautics. **Results:** Sports fan circles, characterized by organization, commercialization, and radicalization, involve misinformation and illegal profits. They cause privacy violations, increase athletes' psychological pressure, misguide youth values, and turn sports events into fan conflict arenas. Despite initial success, short-term interventions haven't addressed the root causes, and platform supervision has lagged. A four-dimensional governance framework is proposed: strengthening legal and platform responsibilities by clarifying cyberbullying and privacy violation boundaries, punishing key instigators and illegal industries, allowing platforms to disable comment sections, and establishing a "sports cyber credit system". **Conclusion:** Effective governance requires balancing strict regulation with respect for fans' enthusiasm. A multi - stakeholder system combining "legal constraints, platform self - regulation, community self - governance, and public participation" can be established by refining systems, leveraging technology, and reshaping cultural values to cultivate a healthy sports culture.
Keywords: Sports fan circle phenomenon; Cyberbullying; Collaborative governance

#33. Football and mental strength

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This research examines the relationship between mental strength and football performance through a mixed-methods approach. The study concludes that targeted psychological training can significantly boost a player's overall performance and recommends incorporating mental conditioning into regular football training programs. Future work should explore the long-term impact of such interventions on career longevity and player development. **Purpose:** This study aims to explore the critical role of mental strength in football performance from the perspective of sports psychology. By understanding the psychological factors that contribute to mental strength, we can develop targeted interventions to enhance players' performance and resilience under pressure. **Methods:** A mixed-methods approach was employed, combining quantitative surveys and qualitative interviews. A total of 200 professional and amateur football players from various clubs in the Asia-Pacific region were surveyed using a validated questionnaire designed to assess mental toughness, self-efficacy, and coping strategies. In addition, in-depth interviews were conducted with 15 elite football players and 5 experienced coaches to gain deeper insights into the psychological experiences and training methods related to mental strength. The data were analyzed using statistical software for quantitative analysis and thematic analysis for qualitative data. **Results:** The survey results revealed that players with higher levels of mental toughness exhibited better performance in terms of goal-scoring, passing accuracy, and defensive skills. They also demonstrated greater self-efficacy and more effective coping strategies in high-pressure situations. The qualitative interviews highlighted the importance of mental preparation in enhancing mental strength. **Conclusion:** The study concludes that mental strength is a crucial determinant of football performance. By integrating psychological training into regular football practice, players can develop the mental resilience needed to excel in competitive environments.
Keywords: Football, Mental Strength, Sports Psychology

#36. Chinese practice of rural sports service for common prosperity and sharing

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Purposes: We will improve the level of rural sports services for common prosperity and sharing, and provide multi-level and diversified sports services for rural residents. **Methods**: This study selected three typical rural areas in Zhejiang Province as the research object, and used the research methods of field research and semi-structured interviews to explore the Chinese practice and experience of rural public sports service sharing.**Results**:1.The theoretical logic of rural public sports service sharing wealth. This paper explores the common prosperity and sharing of rural public sports services from the perspective of the universality, co construction, comprehensiveness and gradualness of common prosperity. With universal sharing as the fundamental goal, co construction and sharing as the endogenous driving force, comprehensive sharing as the core content, and gradual sharing as the implementation strategy, we will solidly promote inclusive and high-quality sharing.2.China's practice of rural public sports service for common prosperity and sharing. First, driven by innovation, promote the intelligent transformation of service supply. Second, political and social interaction, government leadership and social participation go hand in hand. Third, mutual integration and mutual promotion, sports service and Rural Revitalization are embedded and integrated.3.China's experience in rural public sports services. First, we should use digital empowerment to achieve wisdom, common prosperity and sharing. Second, we should improve quality and expand capacity to achieve universal common prosperity and sharing. Third, achieve balanced common wealth sharing through systematic planning. Fourth, realize co construction, common prosperity and sharing through collaborative governance. Fifthly, realize dynamic common wealth sharing step by step. **Conclusions**: We should be guided by common prosperity, strengthen policy coordination and institutional cohesion, and promote the joint efforts of the supply side and the demand side. Improve the supply mechanism and improve the intelligent and digital level of service supply.
Keywords: Rural public sports service; Common wealth and sharing; Chinese practice

#47. Research on Strategies for the High-Quality Development of Public Sports Services for Digitalizing National Fitness

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Based on the theory of overall governance, this paper analyzes the contradiction between digital supply and demand of national fitness public services, and proposes a collaborative path between the government's overall resource allocation and social precise digital penetration to help high-quality development. **Purpose:** Focusing on the digital supply and demand of national fitness public sports services, this paper analyzes the problems faced by capitalization in promoting the high-quality development of national fitness public sports services based on the overall governance theory, in order to provide a theoretical reference for solving the gap between actual demand and existing supply. **Methods:** With the help of CNKI and Web of science databases as data source platforms, this paper uses literature and logical analysis, induction, deduction, logical reasoning and other methods to sort out and analyze the collected literature, in order to lay a theoretical support for this research. **Results:** The government should strengthen the ability of resource allocation, achieve overall governance, promote the intelligent upgrading of sports facilities, closely follow the dynamic trend of group consumption, formulate and implement digital transformation plans, and comprehensively promote the intelligent transformation of sports facilities to integrate into the digital

governance system. Society should ensure that capitalization permeates every aspect of public services, accurately connect with potential demand, and make full use of the law of "supply and demand create their own demand". Combined with the connotation of "digital literacy", cultivate digital talents on a large scale. **Conclusion:** It is necessary to take the application of digital technology as the carrier, strengthen the closed-loop strengthening of public service management, supply and feedback based on technological advantages, explore the key direction and content of the construction of the national fitness public service system empowered by digital technology, and find and solve the problems existing in the public service of national fitness, so as to lay a good foundation for the high-quality development of public services empowered by digital technology for national fitness in the new era.
Keywords: Digital Empowerment , National Fitness, Public Sports Services

#48. Training Strategies to Enhance Tactical Awareness in Volleyball Players

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Tactical awareness in volleyball setters drives strategic decision-making and team success. This study tests an integrated training framework (theory, technique, psychology, teamwork) to enhance setters' tactical intelligence, showing marked improvements in anticipation, execution, and cohesion. **Purpose:** Develop strategies to boost setters' tactical awareness, emphasizing situational judgment, technical precision, mental resilience, and team coordination. **Methods:** Mixed-methods design: 1.Theory: Tactics, opponent analysis, simulations.2.Technique: Precision passing, deceptive plays. 3.Psychology: Stress management, agility drills. 4.Teamwork: 3v3 scenarios, match simulations. Data: Performance metrics, video analysis, feedback. **Results:** Setters improved their ability to anticipate opponents' tactics by 35%. The accuracy of deceptive passes increased by 28%, reducing interception rates. Performance anxiety among players decreased by 40% through mental conditioning. Teams achieved a 22% higher win rate in competitive matches. Qualitative feedback highlighted enhanced leadership clarity and proactive communication. **Conclusion:** Integrated training transforms setters into strategic leaders, elevating team performance. Future research should assess long-term and cross-cultural impacts.
Keywords: Volleyball; Setter; Tactical Awareness; Training Methods; Mental Resilience; Team Coordination

#50. Research on the Cultivation of Youth Volleyball Reserve Talents in Jiangsu Province, China under the Background of Integration of Physical Education and Sports

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Under the policy of integrating sports and education, China emphasizes the balanced development of youth cultural learning and physical fitness. As a key province in volleyball development, Jiangsu faces challenges in cultivating youth reserve talents, which aligns with the national strategy of revitalizing the "three major sports" to build a sports powerhouse. **Purpose:** This study aims to examine the status quo of youth volleyball reserve talent cultivation in Jiangsu Province, identify systemic bottlenecks, and propose actionable strategies to enhance the quality and sustainability of talent development under the sports-education integration model. **Methods:** Utilizing a mixed-methods approach, the research combines literature review, questionnaire surveys (targeting coaches, athletes, and administrators), and semi-structured interviews with stakeholders in Jiangsu's volleyball training system. Data were analyzed to assess infrastructure, coaching quality, talent

selection mechanisms, and competition organization. **Results**: Key challenges include: (1) Insufficient qualified coaches, with limited training opportunities and uneven distribution of expertise; (2) Outdated and insufficient training facilities, particularly in underdeveloped regions; (3) Unscientific talent selection mechanisms, marked by regional disparities and a lack of standardized criteria; (4) Fragmented competition systems hindering athlete exposure and development. **Conclusion:** To address these issues, the study proposes a multifaceted approach: strengthening coach recruitment and training programs, upgrading infrastructure with equitable funding distribution, establishing scientific talent selection criteria integrating physiological and psychological metrics, and fostering collaborative, multi-level competition platforms. These strategies aim to optimize Jiangsu's youth volleyball reserve talent cultivation system, aligning with national goals for sports-education integration and the revitalization of team sports. The findings provide actionable insights for policymakers and practitioners to advance sustainable development in youth volleyball training.
Keywords: Youth volleyball; Sports-education integration; Reserve talent cultivation; Training infrastructure; Talent selection

#54. Research Hotspots and Global Trends in AI-Driven Sports Science: A Scientometric Analysis

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Despite rapid advancements in AI applications within sports science, systematic analyses comparing global and regional research landscapes remain scarce. Existing studies often overlook interdisciplinary integration patterns and cross-country disparities in academic influence, limiting evidence-based strategies for fostering innovation. **Purpose:** This study maps the intellectual structure, collaborative networks, and emerging trends in AI-sports research (2015–2024), identifying critical gaps between international and Chinese contributions to inform policy and interdisciplinary collaboration. **Methods:** Using 10,124 English (Web of Science) and 798 Chinese (CNKI) publications, we conducted co-authorship, keyword co-occurrence, and burst detection analyses via CiteSpace 6.3.R1. **Results:** Global publications surged exponentially (CAGR=38.30%), with the China and U.S. dominating output. However, U.S. research exhibited higher centrality (0.14 vs. China's 0.02), reflecting greater influence. International studies prioritized computer science-engineering-sports triadic integration (65.81%), while Chinese research focused narrowly on sports science (64.85%). Collaboration networks were fragmented globally (density<0.1), with U.S. institutions (e.g., UC System) leading cross-disciplinary teams. Thematic divergences emerged: international hotspots emphasized machine learning-driven health monitoring, wearable sensors and computer vision-driven motion analysis, while China prioritized macro-level digital sports ecosystems. Emerging trends highlighted AI-enhanced training optimization, injury recovery and image processing abroad versus policy-driven digitalization domestically. **Conclusion:** This study innovatively reveals structural imbalances: (1) China's high productivity contrasts with low global centrality, signaling a "quantity-over-impact" dilemma; (2) Disciplinary silos hinder China's technical innovation; (3) Ethical-technical governance gaps persist globally. By proposing a "data-sharing-ethics" synergy framework, we emphasize urgent needs for adaptive algorithms, cross-border collaboration, and talent cultivation.
Keywords: AI in Sports, Scientometric Analysis, Research Disparities

#58. Fitness and Quality of Life in Adolescent Judokas with Intellectual Disabilities: A European Multicenter Study

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Adolescents with intellectual disabilities (ID) commonly display low physical fitness and reduced quality of life, often linked to physical inactivity and sedentary behaviors (Yuan et al., 2022). Physical activity is a key determinant of health across populations. Within this framework, adapted judo has proven effective in improving motor skills, social interaction, and physical fitness—factors closely associated with enhanced quality of life (Pieranzotti et al., 2022). As a moderate-to-vigorous intensity martial art, judo promotes physical health, enjoyment, and high adherence. **Purpose**: This study examined the relationship between health-related physical fitness and quality of life in adolescents with ID practicing judo. **Methods**: A total of 109 adolescent judokas (39 girls, 70 boys) with mild to moderate ID (mean age: 14.1 ± 2.3 years) participated. They were recruited from six European countries: Greece (n=22), Portugal (n=19), Spain (n=24), Italy (n=15), Ireland (n=15), and Switzerland (n=14). Informed consent and assent were obtained. Physical fitness was assessed via waist circumference, six-minute walk test (6MWT), standing long jump, and handgrip strength. Quality of life was measured using the KidsLife questionnaire (Gómez et al., 2016). Descriptive statistics and Pearson's correlation coefficients were calculated. **Results**: Mean values were: waist circumference = 81.1 ± 19.1 cm; 6MWT = 509 ± 211 m; long jump = 127.2 ± 48.1 cm; KidsLife score = 91.3 ± 17.5. Significant correlations emerged between quality of life and 6MWT ($r = 0.59$; $p < 0.01$), and handgrip strength ($r = 0.29$; $p < 0.01$). **Conclusions**: Enhancing cardiovascular endurance through targeted interventions may positively influence well-being, autonomy, and life satisfaction in adolescents with ID. These findings support incorporating aerobic and strength-based components into adapted programs such as judo. Further research is warranted given the moderate strength of observed correlations.
Keywords: Adolescents, Intellectual Disability, Judo, Physical Fitness, Quality of Life

#66. The relationship between physical activity and health-related quality of life in middle-aged and older adults

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Middle-aged and elderly people face the problem of declining physical functions and severe psychological problems, such as a lack of dignity and depression, which seriously affect their health-related quality of life (HRQOL). Physical activity has become an important influencing factor in improving the health of middle-aged and elderly people and safeguarding their HRQOL. **Purpose:** Based on the active health perspective, this study investigates the relationship between participation in physical activity and the HRQOL of middle-aged and elderly populations in China. **Methods:** This study surveyed 762 middle-aged and elderly people from physical activity centers for the middle-aged and elderly in Hunan Province. The questionnaire structure consisted of five parts: participants' basic information and four scales, namely PARS-III, SES, CD-RISC, and EQ-5D-5L. Structural equation modeling was conducted using SPSS 24.0 and AMOS 24.0 to analyze the mediating effects of psychological resilience and self-esteem between physical activity and health-related quality of life, and to test the issue of gender cohort variability. **Results:** Physical activity was positively associated with HRQOL ($\beta = 0.24$, $p < 0.05$); self-esteem mediated physical activity and

HRQOL (26.61% of the effect); psychological resilience mediated physical activity and HRQOL (24.76% of the effect); self-esteem and psychological resilience were chain mediators of physical activity and HRQOL (9.43% of effects); the chain mediation model was valid in both male and female middle-aged and elderly groups. **Conclusion:** Regular and long-term participation in physical activity helps to maintain self-esteem, psychological resilience, and HRQOL; when middle-aged and older people engage in physical activity with their peers, the positive confrontation between mind and body helps them to gain a clearer self-perception to enhance self-esteem, strengthen psychological resilience, and improve their perception of HRQOL.
Keywords: middle-aged and elderly population, physical activity, health-related quality of life

#81. Research on the influence of digital transformation on sports industry and its influence mechanism

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With the advancement of information technology, we are currently residing in a highly digitalized society. Consequently, individuals have become both recipients and transmitters of information to some extent. **Purpose:** The aim is to comprehend the specific manifestations and mechanisms through which digital transformation impacts the sports industry. **Methods:** This study employs literature review methodology along with case analysis to summarize previous research findings, consolidate concepts pertaining to digital transformation and business models, and analyze their operational mechanisms within the sports industry. **Results:** The emergence of digital media has significantly enhanced the current situation. For enterprises, it offers rapid dissemination, a wide audience reach, and cost-effective information release, thereby revolutionizing the trajectory of sports industry development. Moreover, through online interaction mechanisms, enterprises can make more precise decisions supported by data analytics, thus providing a clearer direction for the growth of the sports industry. However, as digitalization advances further, digital media may potentially influence consumers' judgment to some extent; arbitrary editing or tampering with data could lead consumers to become "mindless" and fall into businesses' deceptive traps. **Conclusion:**(1) Digital transformation facilitates a better understanding of value creation factors within the sports industry context. 2) Digital transformation empowers the sports industry to achieve diverse developmental objectives through social media platforms. (3) Digital transformation enables sports enterprises to identify emerging trends effectively while maintaining competitiveness and gaining deeper insights into prevailing market conditions. (4) It assists businesses in engaging with customers through reciprocal relationships rather than relying solely on traditional direct interactions.
Keywords: sports industry, sports digitization, business model, social media

#89. Research on the Impact of Coaches' Service-oriented Leadership Behavior on Trainees' Training Satisfaction

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Guided by service-oriented leadership theory, this study examined how tennis coaches' caring, empowering, and exemplary behaviors influence trainees' training satisfaction (effectiveness, guidance, environment), offering a framework to enhance coaching and service quality. **Method:** Literature review established the theoretical basis. A validated 5-point scale (Cronbach's α=0.95, KMO=0.93) was used to survey 318 trainees. Data were analyzed via SPSS 27.0 using descriptive,

correlation, and factor analyses. **Results:** Coaches' service-oriented behaviors (care, empowerment, modeling) were significantly and positively correlated with trainees' satisfaction ($p<0.01$), forming an "emotion-ability-environment" mechanism. Caring behavior (3.72±0.91) strongly enhanced recognition of professionalism through emotional support ($r=0.77$, $\beta=0.42$). Empowering behavior (3.65±0.91) improved skill acquisition and autonomy, though excessive empowerment increased anxiety in less-skilled trainees. Exemplary behavior (3.58±0.88) reinforced environmental engagement, particularly among adolescents. Among satisfaction dimensions, guidance scored highest (3.67±0.92), followed by effectiveness and environment (both 3.64±0.90). **Conclusion:** A staged service-oriented leadership strategy is recommended: (1) *Novice stage*—build trust through consistent care; (2) *Intermediate stage*—balance guidance with 30–40% autonomy; (3) *Advanced stage*—facilitate professional networking and exemplary modeling. Intelligent monitoring tools (e.g., emotion recognition, heart rate sensors) should track satisfaction in real time; fluctuations >15% warrant immediate attention. Empowerment levels should align with trainee competence, and quarterly reviews using self- and trainee feedback are advised to sustain coordinated growth across "emotion-ability-environment."
Key words: Service-oriented leadership behavior; Training satisfaction; Tennis coach

#92. The Impact of Sports Event Tourism on Tourists' Subjective Well-being: A Study Based on Mass Orienteering Events

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Sports event tourism is increasingly recognized for enhancing subjective well-being (SWB), but there are still limited studies on orienteering events.This study examines how mass participation orienteering events affect SWB across distinct demographic groups.**Purpose:**To quantify SWB changes in participants of the 2025 Running Color Yunnan·Ancient Dian Orienteering Season (Kunming Station) across five categories: Open Male (OM), Open Female (OF), Junior Male (JM), Junior Female (JF), and Parent-Child (PC) groups.**Methods:** A longitudinal survey design was implemented with pre-event (T1) and post-event (T2) assessments. Adult participants (n=355) completed the BBC Subjective Well-being Scale (BBC-SWB), while minors (n=95) used the Children's World Subjective Well-Being Scale (CW-SWBS). Statistical analyses included paired t-tests for within-group comparisons and ANOVA for inter-group differences.**Results:**1.Significant SWB improvement was observed across all groups (T1 mean=68.3±9.1 vs T2 mean=76.8±8.4, $p<0.001$).2.PC group showed the largest gain (ΔSWB=+12.7%, $p<0.001$).3.Minors exhibited greater improvement than adults (JF: Δ+14.2% vs OF: Δ+8.1%, $p=0.003$).**Conclusion:**Orienteering event tourism significantly enhances participants' SWB, with the strongest effects observed in family participants and minors. Event organizers should prioritize age-specific program design to maximize well-being benefits.
Keywords: sports tourism, subjective well-being, orienteering

#102. Effects of water intake and physical activity on urine volume: an N-of-1 cross-intervention study

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Low urine volume is associated with renal impairment and dehydration, yet the physiological determinants of its fluctuation remain unclear. **Purpose:** To investigate the effects of fluctuations in water intake and physical activity on 24-hour urine volume. **Methods:** A one-year N-of-1 factorial

crossover intervention study was conducted in a healthy 29-year-old female, using a 2×2 design involving hydration level (low/high) and exercise (with/without). Six cycles of four 10-day conditions (control, increased water intake [+1.5 L/day], increased physical activity [+12,000 steps/day], and combined water and activity intervention) were implemented, each separated by a 4-day washout period. Urine volume was calculated as the average of 24-hour collections on weekdays and weekends. A mixed-effects model was used, with water intake and physical activity as fixed effects and cycle-to-cycle variability as a random effect. **Results:** Mean water intake was 2.2 ± 0.2 kg/day in the non-water intervention conditions, and 3.6 ± 0.1 kg/day in the water intervention conditions. Step counts were 9,618 ± 564/day (non-exercise) and 21,351 ± 760/day (exercise). Mean urine volume under control conditions was 1.9 ± 0.4 kg/day. Increased water intake significantly raised urine volume by 1.3 kg/day (95% CI: 1.0 to 1.5), while increased physical activity significantly reduced it by 0.3 kg/day (95% CI: -0.6 to -0.02). No significant interaction was observed between water intake and physical activity on urine volume(p=0.18). **Conclusion:** Urine volume was positively associated with water intake and inversely associated with physical activity. These findings may improve our understanding of the impact of lifestyle on urinary output and inform hydration strategies.
Keywords: exercise, cycle, water intervention, hydration strategies

#103. The effects of amino acid mixture intake on abdominal fat reduction: a meta-analysis

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We have focused on amino acids as food components that promote anti-obesity effects through light physical activity, and we have accumulated research findings on mixtures of arginine, alanine, and phenylalanine (A-mix). Several studies have reported on the effects of A-mix ingestion combined with physical activity on body fat. However, a comprehensive systematic review (SR) that integrates these findings has not yet been conducted. Based on this quantitative SR and meta-analysis (MA), A-mix intake combined with physical activity facilitates a reduction in abdominal total fat area in overweight adults, with particularly significant effects observed in abdominal subcutaneous fat area. These A-mix-containing beverages are currently registered as Foods with Function Claims and Foods for Specified Health Uses in Japan. **Purpose:** To determine the fat-reducing effects of combining A-mix intake with physical activity. **Methods:** PubMed, JDreamⅢ, and UMIN Clinical Trials Registry were systematically searched to identify randomized control trials (RCTs) examining the effects of A-mix intake combined with physical activity on abdominal fat until 22 February 2024. A random-effects model was used to pool the mean differences (MD) and 95% confidence intervals (CI) for the abdominal total, subcutaneous, and visceral fat areas. **Results:** Two studies involving overweight adults (BMI: 25-<30 kg/m^2) were included. The meta-analysis showed that, compared with the placebo group, the A-mix group experienced a significant decrease in abdominal total fat area (MD: -9.74 cm^2; 95% CI: -18.50 to -0.98 cm^2; $p<0.05$), in abdominal subcutaneous fat area (MD: -6.57 cm^2; 95% CI: -13.10 to -0.05 cm^2; $p<0.05$), while visceral fat area slightly decreased but was not statistically significant (MD: -3.06 cm^2; 95% CI: -7.12 to 1.00 cm^2; $p=0.14$). **Conclusion:** A-mix supplementation in combination with physical activity can promote body fat reduction in overweight adults. The registration numbers for these Foods with Function Claims are J786–790 and J1025.
Keywords: amino acids supplementation, anti-obesity, meta-analysis

#114. Prevalence of musculoskeletal pain and their associated factors in Japan: A cross-sectional prefecture-level ecological study

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Regional disparities in musculoskeletal pain (MSP) in Japan remain unclear due to its multifactorial nature. **Purpose:** We aimed to (1) examine regional MSP distribution by sex across Japan's 47 prefectures and (2) identify associated factors. We hypothesized that prevalence would vary regionally, be higher in women, and that associated factors would differ by sex and pain type. **Methods:** This ecological study analyzed government data that had been collected through questionnaire surveys and obtained from the internet. Prevalence, calculated from symptomatic cases and prefecture populations, served as the dependent variable. Independent variables included demographic and lifestyle indicators. Forward stepwise multiple regression analyses were performed by pain type, stratified by sex. **Results:** In 2022, national prevalence was 8.0% for shoulder stiffness (men: 5.3%, women: 10.6%), 10.2% for low back pain (men: 9.1%, women: 11.3%), and 5.6% for joint pain (men: 4.0%, women: 7.0%). Prevalence was higher in women ($P < 0.01$) and tended to be higher in western than in eastern Japan. Fatigue was positively associated with all pain types ($P < 0.01$). In men, marital status and treatment facilities (positive) and cold extremities and employment (inverse) were linked to shoulder stiffness (all $P < 0.05$) ; salt intake, cold extremities, and housework (positive) and education and single-person households (inverse) to low back pain (all $P < 0.05$) ; and sleep duration, treatment facilities, and old population (positive) to joint pain (all $P < 0.05$). In women, cold extremities, treatment facilities, and smoking (inverse) were linked to shoulder stiffness (all $P < 0.01$); old population and cold extremities (positive) to low back pain (all $P < 0.01$); and old population, cold extremities, and housework (positive) to joint pain (all $P < 0.05$). **Conclusions:** MSP is more prevalent in western Japan and among women. Fatigue was a common factor across sexes and pain types, suggesting targets for region- and sex-specific interventions and policies to reduce disparities and promote healthy longevity.
Keywords: musculoskeletal pain, geographic variation, sex differences

#117. The Relationship between Trainee Teachers' Situational Motivation, Motivational Climate, and Mental Well-Being in Physical Education

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Physical education plays a vital role in the development of trainee teachers, fostering fundamental life skills, promoting physical fitness, and contributing to overall well-being. **Purpose:** This study examined the levels of situational motivation, motivational climate, and mental well-being among trainee teachers in Physical Education. **Methods:** A total of 413 trainee teachers (174 males and 273 females), aged 18 to 23 years, from the Institute of Teacher Education Malaysia Campuses in Sarawak participated in this study. Participants completed the Situational Motivation Scale, the Teacher-Initiated Motivational Climate in Physical Education Questionnaire and the Warwick-Edinburgh Mental Well-Being Scale. The statistical analysis used were descriptive statistics, two-way ANOVA, and hierarchical regression analyses. **Results:** Significant main effects of gender were

observed on external regulation (p = .001), amotivation (p = .001), teacher-initiated performance orientation (p = .003), eudaimonic well-being (p = .01), and hedonic well-being (p = .02). Age groups significantly influenced intrinsic motivation (p = .023), identified regulation (p = .006), teacher-initiated mastery orientation (p < .001), eudaimonic wellbeing (p = .001), and hedonic wellbeing (p = .01). Additionally, gender showed significant effects on external regulation (p = .009), amotivation (p < .001), performance orientation (p < .001), and eudaimonic well-being (p = .04). Teaching methods significantly affected intrinsic motivation (p = .01). Hierarchical regression indicated that gender (β = -.07, p = .04), age groups (β = .08, p = .02), intrinsic motivation (β = .17, p = .02), amotivation (β = .12, p = .02), and teacher-initiated mastery orientation (β = .50, p < .001) were significant predictors of mental well-being, with the strongest influence observed for teacher-initiated mastery orientation. **Conclusion:** The findings suggest that environments emphasising mastery-oriented climates satisfy trainee teachers' autonomy needs, promoting voluntary engagement and enhancing self-motivation, ultimately contributing to better mental well-being.
Keywords: Situation Motivation, Motivational Climate, Mental Well-being

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