UNIVERSITY OF PÉCS
Faculty of Health Sciences

I. PHYSICAL ACTIVITY AND QUALITY OF LIFE

international conference

BOOK OF ABSTRACTS

MAY 28, 2025

NATIONAL RESEARCH, DEVELOPMENT AND INNOVATION OFFICE
HUNGARY

PROJECT FINANCED
FROM THE NRDI FUND

zone

University of Pécs
Faculty of Health Sciences

1ST INTERNATIONAL CONFERENCE ON PHYSICAL ACTIVITY AND QUALITY OF LIFE

BOOK OF ABSTRACTS

MAY 28, 2025

ISBN: 978-963-626-422-2

Zalaegerszeg

2025

Copyright protection:

PREAMBLE SPEECH

Dear Colleagues, Guests, and Friends,

It is my great pleasure and honor to welcome you to the **1st International Conference on Physical Activity and Quality of Life**, hosted by the Faculty of Health Sciences at the University of Pécs.

This conference brings together a diverse community of scholars, decision-makers, and professionals from both Hungary and around the world, united by a shared commitment to advancing research and practice in sport and health sciences. Our gathering today serves not only as an academic forum but also as a platform for meaningful dialogue, collaboration, and innovation in the pursuit of healthier, more active societies.

One of the central aims of this conference is to promote an active lifestyle as a cornerstone of public health. By translating scientific findings into real-world solutions, we contribute to broader goals such as those outlined in the **Active Hungary** initiative and the **World Health Organization's** objective of reducing global physical inactivity by 15%.

This event is made possible through the support of the **National Research, Development and Innovation Office**, under the Scientific Patronage Programme (project number **MESZ_SZ 149403**), and we are sincerely grateful for their contribution.

I encourage you to take full advantage of this opportunity to exchange ideas, build new partnerships, and be inspired by the wealth of knowledge and experience shared over the course of this conference.

On behalf of the organizing committee and the University of Pécs, I wish you a rewarding and enjoyable conference.

Warm regards,

Prof. Dr. Pongrác ÁCS
Dean
Faculty of Health Sciences
University of Pécs

PROGRAM

Location:
ZalaZONE CONFERENCE AND EVENT CENTER
ZalaZONE Square 1, H-8900 Zalaegerszeg, Hungary

10:00 - 10:15 **OPENING CEREMONY** (ZalaZone, Zalaegerszeg)

Welcome speech
Prof. Dr. László Palkovics PhD
Dr. Tibor Vadvári PhD
Mgr. Ivana Chloubová PhD
Prof. Dr. Valeria Tothova PhD

10:15 - 10:30 **PLENARY SESSION**

Prof. Dr. Pongrác Ács PhD
Physical Activity Patterns Among High School and University Students in the V4 Countries

SECTION ROOM 1

10:30 - 11:30 **SECTION 1 -** Chair Viktória Prémusz, Ferdinand Salonna

PHYSICAL ACTIVITY AND QUALITY OF LIFE OF YOUTH AND UNIVERSITY STUDENTS

10:30	**Ferdinand Salonna** – Physical Activity Patterns Among High School and University Students in the V4 Countries – Preliminary Results
10:40	**Radenko M. Matić** – Physical Activity Messaging Recommendations for Different Groups: Children and Young People
10:50	**Szabolcs Halasi** – Preventive Health Behavior of School-Age Children in Hungary and Serbia: focus on obesity
11:00	**Věra Logan Kuchařová** – Screen Time Versus Active Time - Interim Data from a V4More Study (Czech Republic)
11:10	**Žolt Namestovski** – Robotics Competitions and Physical Activity
11:20	**Viktória Prémusz** – Move to Feel Better? Exploring the Link Between Physical Activity and Life Satisfaction in V4 University Students
11:30	**Discussion**

11:40 - 12:10 **COFFEE BREAK**

SECTION 2 - Chair Alexandra Makai, Darinka Korovljev

PHYSICAL ACTIVITY AND QUALITY OF LIFE OF ADULTS AND SENIORS

12:10	**Darinka Korovljev** – Active Ageing and Quality of Life: Strategies for Enhancing Well-being in Older Adults
12:20	**Saša Pišot** – Active Lifestyle Matters: A Longitudinal Perspective on Behavioral Determinants in Older Adults
12:30	**László Attila Krutek** – Power locked in moment
12:40	**Kaja Teraž** – Active Lifestyle in Old Age: The Role of Physical Activity and Nutrition in Promoting Healthy Ageing
12:50	**Marian Stelmach** – Correlates of Sedentary Behaviours among Adults from Eastern Poland
13:00	**Alexandra Makai** – Sleep, Sit, Move: Adherence To 24-Hour Movement Guidelines In Higher Education of the V4 Coutries
13:10	**Discussion**

13:20 - 14:00 **LUNCH**

SECTION ROOM 2

10:30 - 11:40 **SECTION 3 -** Chair František Dolák, Alena Buková

PHYSICAL ACTIVITY AND QUALITY OF LIFE OF HEALTHY INDIVIDUALS AND PEOPLE WITH CHRONIC DISEASES

10:30	**František Dolák** – Multidisciplinary Collaboration in the Concept of Prehabilitation with a Focus on Knee and Hip Arthroplasty
10:40	**Megha Sharma** – The Effect of Exercise on the Quality of Life and Survival amongst Patients with Gastrointestinal Cancer
10:50	**Joanna Baj-Korpak** – Physical Fitness Trends of Polish Children and Adolescents, Participants of the Athletics for All! Program
11:00	**Zuzana Küchelová** – Physical Activity and Lifestyle Awareness among Oncological Patients
11:10	**Josef Mitáš** – Findings from the IPEN Adult Study – Built Environment and Physical Activity
11:20	**Alena Buková** – From Secondary School to University: Lifestyle Patterns of Slovak Students
11:30	**Ivana Milovanović** – Exploring Athletes' Perspectives on Prohibited Substance Use in Serbian Combat Sports

11:40 - 12:10 **COFFEE BREAK**

12:10 - 13:30 **SECTION 4** Chair Szabolcs Halasi, Radenko M. Matić

YOUNG RESEARCHERS (poster section)

12:10	**Zsófia Kovács-Szabó –** Quality of Life and Physical Activity in Hungarian Women with Endometriosis: A Cross-Sectional Study
12:15	**Bence Martin Ruppert –** The Impact of a Structured Training Program Compared to Daily Physical Education in School-Aged Children, a Case-Control Study

12:20	**Bettina Trixler –** Physical Activity in Children with Autism Spectrum Disorders
12:25	**Norbert Fóris** – From Hobby to High-Performance: Health Behaviors of Amateur vs. Professional E-Athletes
12:30	**Tamás Beregi –** Move More, Sleep Better: Exploring key predictors of sleep quality amoung young adults in v4 countries
12:40	**Dereje Mesfin –** Assisted reproductive technology implications for infertility clients in developing countries: systematic review
12:45	**Barnabás Emődy –** Cost-Benefit Analysis Methodology for Assessing the Return on Investment in Sports Infrastructure Development
12:50	**Shalini Chauhan –** Impact of GSY Yoga Protocol on Salivary Cortisol among Medical Students – A Randoised Controlled Trial
12:55	**Rizky Nurulfa –** Exploring the Correlation Between Physical Activity, Sleep Behavior, and Eating Habits Among Adolescents in Indonesia
13:00	**Larissza Tóth –** The Impact of Physical Activity on the Mental Health and Academic Performance of Hungarian University Students
13:10	**Discussion**

13:20 - 14:00 **LUNCH**

GALA DINNER

20:00 - **Hotel Arany Bárány**
1 Széchenyi Square, 8900 Zalaegerszeg, Hungary

ABSTRACTS

Alena Buková[1], Petra Tomková[1], Ivan Uher[1], Tatiana Kimáková[2], Ľuboš Vojtaško[3], Ferdinand Salonna[1]
[1]Institute of Physical Education and Sport, Pavol Jozef Šafárik University in Košice, Košice, Slovakia,
[2]Department of Public Health and Hygiene, Faculty of Medicine, Pavol Jozef Šafárik University in Košice, Košice, Slovakia,
[3]Institute of Languages, Social Sciences and Academic Sports, Technical University of Košice, Košice, Slovakia

FROM SECONDARY SCHOOL TO UNIVERSITY: LIFESTYLE PATTERNS OF SLOVAK STUDENTS

Background:
The study aimed to evaluate self-perceived changes in lifestyle factors, particularly physical activity (PA), following the transition from secondary school to university. A secondary objective was to examine the relationship between lifestyle variables and weekly PA frequency. Key factors assessed included sleep quality, dietary habits, alcohol and tobacco consumption, and PA frequency.

Methods:
The study surveyed 1,665 first-year undergraduate students at Slovak public universities (mean age: 20.73 years, SD ±1.39) using adapted versions of Healthy Lifestyle Questionnaire (CEVS-II) and the Brief Pittsburgh Sleep Quality Index (B-PSQI). Data collection took place between December 2022 and February 2023.

Results:
Significant declines were observed in most lifestyle variables after students transitioned to university. The proportion of students engaging in irregular, or no PA increased from 37% before university to 46% during their studies ($p < 0.01$). Reports of tiredness upon waking also rose, from 52 to 64% ($p < 0.01$). Meal frequency decreased, particularly among males, with the percentage of students eating only 1–2 meals per day rising from 9 to 15% ($p < 0.05$). Conversely, the regularity of breakfast consumption increased, increasing from 65 to 73% ($p < 0.01$). No significant changes were observed in tobacco smoking habits.

Conclusion:
The findings highlight a notable reduction in PA and other lifestyle factors during the transition to university life. These results emphasize the need for targeted interventions to support healthy behaviors during this critical life phase.

Keywords: Lifestyle change, university students, physical activity, sleep quality, dietary habits, health behavior transition.

Bence Martin Ruppert[1], Bálint Fazekas[1], Zsófia Kovács-Szabó[1], Alexandra Makai[1,2], Viktória Kovácsné Bobály[1], Melinda Járomi[1]
[1]University of Pécs, Faculty of Health Sciences
[2]University of Pécs, Faculty of Health Sciences, Doctoral School of Health Sciences

THE IMPACT OF A STRUCTURED TRAINING PROGRAM COMPARED TO DAILY PHYSICAL EDUCATION IN SCHOOL-AGED CHILDREN, A CASE-CONTROL STUDY

Background:
Introduction: We are in the early 21st century, where today's adolescents have been born into the world of mobile phones and the internet. As a consequence, there is a continuous increase in physical inactivity among young people, which later leads to harmful health effects. Chronic diseases could be preventable through regular physical activity and proper nutrition. To prevent the development of these diseases, daily physical education was introduced.

Methods:
Methods: In our research, we conducted a study in an elementary school between February and March 2024. We examined the effects of an eight-week exercise program in the context of daily physical education. The participants included students aged 10 to 14 years. Measurements related to body composition, such as body fat percentage and Body Mass Index, were taken using Netfit. As for the conditioning abilities, we assessed aerobic endurance through a 20-meter shuttle run. In terms of coordination abilities, we examined balance using the star balance test. The current strength of the core muscles was measured using the core strength and stability test.

Results:
Results: The athletics group was 14% better during the post-measurement of the 20m pendulum run, and there was also a significant difference in the result of the standing long jump ($p=0.003$), an improvement of 7.97%. We found no significant difference in the results of students who participated in daily physical education between the pre- and post-measurements.

Conclusion:
Conclusion: In a longer time interval, it can be assumed that the aerobic capacity also improves significantly, the students who participated in the training program all fell into the healthy and appropriate assessment zone for the tests. As a result of daily physical education, there is no detectable difference over time.

Keywords: Keywords: daily physical education, athletics, body composition, exercise program

Bettina Trixler[1], Henriette Pusztafalvi[2]
[1]Doctoral School of Health Sciences, Faculty of Health Sciences, University of Pécs, Pécs, Hungary
[2]Department of Health Promotion and Public Health, Faculty of Health Sciences, University of Pécs, Pécs, Hungary

PHYSICAL ACTIVITY IN CHILDREN WITH AUTISM SPECTRUM DISORDERS

Background:
Autism spectrum disorder can be associated with social and communication difficulties, inflexible behavior patterns, and sensory sensitivities. Exercise is essential for maintaining physical and mental health and developing a healthy lifestyle. However, for people with autism, engaging in exercise can be challenging in many ways. Developing a healthy lifestyle often requires more support and a personalized approach. This can help them have the opportunity to exercise regularly and enjoy it.

Methods:
The literature search aimed to collect and analyze publications published after the COVID-19 pandemic regarding the impact of physical activity on the lifestyle of children with autism. A search based on specific keywords ultimately resulted in 15 relevant studies.

Results:
Research supports that children with autism engage in less physical activity on average than their neurotypical peers. This is due to complex factors, including motor, communication, and social difficulties. Understanding the meaning and purpose of physical activity is often difficult, intrinsic motivation is often lacking, and inadequate communication of instructions or goals can also hinder participation. However, regular exercise has a positive effect on the behavior, attention, sleep, mood, and anxiety levels of people with autism. Structured, individualized exercise programs can significantly contribute to improving quality of life.

Conclusion:
Further longitudinal, controlled group research is needed to better understand the long-term effects of physical activity on the physical and mental health of individuals with autism. It is important that the immediate environment knows the importance of physical activity and can support its implementation in everyday life. Making alternative forms of exercise available can encourage the involvement of individuals with autism.

Keywords: autism, physical activity, way of life

Darinka Korovljev[1], Jovan Kuzmanović[1], Marijana Ranisavljev[1], Nikola Todorović[1], Valdemar Štajer[1], Sergej Ostojić[1,2,3]
[1]Applied Bioenergetics Lab, Faculty of Sport and Physical Education, University of Novi Sad, Novi Sad, Serbia
[2]Faculty of Health Sciences, University of Pécs, Pécs, Hungary
[3]Department of Nutrition and Public Health, University of Agder, Kristiansand, Norway

ACTIVE AGING AND QUALITY OF LIFE: STRATEGIES FOR ENHANCING WELL-BEING IN OLDER ADULTS

Background:
This study explores the relationship between active aging and quality of life, aiming to identify effective strategies for enhancing the well-being of both community-dwelling and institutionalized older adults.

Methods:
A comprehensive literature review was conducted alongside research interventions designed to evaluate the effects of healthy lifestyle strategies on older adults' metabolic profiles, quality of life, and cognitive and physical functions. Key interventions included structured exercise programs such as resistance training, yoga, and Pilates, complemented by educational initiatives focused on healthy lifestyle choices, nutritional strategies, and supplementation to enhance overall well-being.

Results:
The findings emphasize the importance of structured exercise interventions—such as resistance training, Pilates, yoga, and supplementation—along with healthy lifestyle education. These strategies can enhance metabolic profiles, cognitive function, and VO2 max in community-dwelling older adults while also improving the quality of life for institutionalized individuals in areas like physical functioning, emotional well-being, and general health. Ultimately, these approaches promote healthier aging and encourage older adults to remain active in their communities and maintain independence.

Conclusion:
In conclusion, a multi-faceted approach that combines structured exercise interventions, healthy lifestyle education, and nutrition is essential for promoting active aging and improving the quality of life among older adults. Recognizing the importance of these strategies can help shape future policies and programs that support the aging population.

Keywords: Active aging, quality of life, well-being, older adults, community engagement, health promotion

Ferdinand Salonna[1], Ján Junger[1], Alexandra Makai[2], Viktória Prémusz[2], Joanna Baj-Korpak[3], Marcin Weiner[3], Iva Šafaříková[4], Věra Logan Kuchařová[4], Pongrác Ács[2]
[1]Institute of Physical Education and Sports at Pavol Jozef Šafárik University in Košice
[2]Faculty of Health Sciences of the University of Pécs
[3]John Paul II University in Biała Podlaska
[4]Faculty of Health and Social Sciences of the University of South Bohemia

PHYSICAL ACTIVITY PATTERNS AMONG HIGH SCHOOL AND UNIVERSITY STUDENTS IN THE V4 COUNTRIES – PRELIMINARY RESULTS

Background:
This study presents preliminary findings on physical activity patterns among adolescents and young adults in the Visegrád Four (V4) countries.

Methods:
Study is based on self-reported data from the International Physical Activity Questionnaire – Long Form (IPAQ-L). The sample consisted of 4355 participants, of whom 63.8% were female. The mean age was 17.12 years for secondary school students and 21.09 years for university students. Data collection was conducted in April and May 2025. Total MET-minutes per week were analysed by country, gender, and educational stage.

Results:
Among females, the highest physical activity levels were reported by Polish university students (5290.90 MET-min/week), followed by Hungarian secondary school students (4737.08). The lowest values were observed in Hungarian university females (3725.49). Among males, the most active group was Polish secondary school students (5354.38 MET-min/week), while the lowest activity was reported by Hungarian university males (3714.45).

Conclusion:
A general decline in physical activity from secondary school to university was evident in Czechia and Hungary, particularly among females. In contrast, Poland and Slovakia showed stable or increased levels of physical activity among university students, especially males. These findings indicate notable cross-country and gender differences in physical activity during the transition to university, emphasising the need for targeted interventions to maintain active lifestyles in young populations.

Keywords: IPAQ long, physical activity, university, secondary school, Visegrad region

Frantisek Dolák[1], Andrea Hudackova[1], Vera Staskova[1], Lenka Sedova[1], Simona Novotna[1], Marketa Bendova[1], Jan Pertlicek[2], David Musil[2]
[1]Faculty of Health and Social Sciences, University of South Bohemia
[2]Hospital in Ceske Budejovice,a.s., Department of Orthopedic Surgery

MULTIDISCIPLINARY COLLABORATION IN THE CONCEPT OF PREHABILITATION WITH A FOCUS ON KNEE AND HIP ARTHROPLASTY

Background:
Prolonged waiting times for total hip and knee arthroplasty significantly impact patients with osteoarthritis, who often suffer from chronic pain, reduced mobility, and psychological distress. This project aims to evaluate the effectiveness of multidisciplinary prehabilitation as a preoperative intervention to improve patient outcomes.

Methods:
We hypothesize that pain intensity, quality of life, and symptoms of depression in patients awaiting joint replacement can be positively influenced by targeted, multidisciplinary care. A mixed-methods design is used: a survey among 400 patients registered for arthroplasty at České Budějovice Hospital and a controlled intervention study involving 100 participants.

Results:
The intervention includes physiotherapy, nutritional counseling, lifestyle support, and non-pharmacological pain management. It is delivered by a team comprising an orthopedic surgeon, rehabilitation physician, physiotherapist, dietitian, and nurses. The program is designed to improve physical fitness, reduce pain, prepare patients for surgery, and reduce opioid dependence. Outcome measures include standardized tools assessing quality of life (WHOQoL), pain interference, depressive symptoms (Beck Depression Inventory), mobility, and dietary habits. Participants are divided into intervention and control groups. Interventions are conducted in patients' homes or in designated centers.

Conclusion:
The project aims to develop a structured methodology for individualized prehabilitation in joint replacement patients. It promotes the integration of holistic, multidisciplinary care into routine clinical practice and supports further research into preoperative optimization strategies.

Dedication

This project is supported by the internal grant agency of the University of South Bohemia in České Budějovice, Faculty of Health and Social Sciences, grant number 055/2024/H.

Keywords: Arthroplasty, Nursing, Multidisciplinary care, Prehabilitation

Ivana M. Milovanović[1], Vuk Raonić[1], Roberto Roklicer[1], Marko Manojlović[1], Tatjana Trivić[1], Patrik Drid[1,2]
[1]Faculty of Sport and Physical Education, University of Novi Sad, Serbia
[2]Faculty of Medicine, University of Novi Sad, Serbia

EXPLORING ATHLETES' PERSPECTIVES ON PROHIBITED SUBSTANCE USE IN SERBIAN COMBAT SPORTS

Background:
This study explores the personal experiences, motivations, and perceptions of Serbian recreational combat sport athletes regarding the use of prohibited substances, intending to understand how doping functions in their everyday sporting contexts.

Methods:
A qualitative exploratory approach was applied, using semi-structured interviews with 10 male recreational athletes involved in various combat sports. All participants self-reported prohibited substance use during at least one phase of their sporting experience. The interviews covered themes such as substance types, frequency and duration of use, perceived benefits and adverse effects, and the initial sources of information.

Results:
Participants reported being introduced to doping primarily through gym peers, relatives with sports backgrounds, or digital media, while rarely through formal coaching channels. The most commonly reported short-term benefits included increased strength, endurance, and accelerated recovery, along with enhanced aesthetic appearance. Social expectations and peer influence emerged as key motivating factors. Despite reporting satisfaction with the effects, several athletes described negative aftereffects such as muscle and joint pain, and emotional instability. These results reveal a complex interplay of physical, psychological, and socio-cultural factors influencing substance use.

Conclusion:
Doping in recreational combat sports presents a particularly concerning trend, as it often operates beneath the radar of formal anti-doping controls and remains largely invisible to regulatory systems. This "hidden" use not only undermines the ethical foundation of sport but also poses significant health risks, especially given the absence of medical oversight. The normalization of performance-enhancing substances in non-elite settings, coupled with a lack of structured preventive education, underscores the urgent need for systemic, interdisciplinary interventions. Raising awareness, especially among youth and recreational athletes, must become a strategic priority in safeguarding both health and integrity in sport.

Keywords: doping, combat sports, qualitative research, athlete motivation, social influence, recreational sport

Joanna Baj-Korpak[1], Kamil Zaworski[1], Marek Wochna[2], Sebastian Chmara[2], Marian J. Stelmach[1]
[1]Department of Health Sciences, John Paul II University in Biala Podlaska, 21-500, Biala Podlaska, Poland
[2]Polish Athletics Association, Warsaw, 01-839 Warsaw, Poland

PHYSICAL FITNESS TRENDS OF POLISH CHILDREN AND ADOLESCENTS, PARTICIPANTS OF THE ATHLETICS FOR ALL! PROGRAM

Background:
The aim of the current study was to determine physical fitness trends among Polish children and adolescents participating in the nationwide program "Athletics for All!" (AFA). An attempt was made to answer the question of whether the implementation of programs promoting physical activity among youth (as exemplified by the AFA program) has an impact on improving physical fitness and body build indicators as its markers.

Methods:
Physical fitness was assessed in a group of 54,049 young individuals, including 31,789 girls and 22,260 boys, over eight consecutive years of the AFA program's implementation. The assessment was conducted using the OSF test, developed specifically for the AFA program, which includes a 3x10 m shuttle run, standing broad jump, 1 kg medicine ball throw, and a 4-minute run.
Statistical analyses were performed separately for each gender, assuming a significance level of alpha = 0.05. It was verified whether there were significant differences in the means between the groups distinguished based on the year of the study.

Results:
The study results indicate that the implementation of the AFA program promoting physical activity among Polish youth has a positive impact on the improvement of physical fitness and body build parameters. Statistically significant differences were found in the mean values of measurements taken over the course of eight consecutive years. The results of multiple comparisons between the mean values of all the analyzed variables in different years revealed significant differences in most of the comparisons.

Conclusion:
The level of physical fitness among participants of the AFA program remained relatively stable over nearly a decade, which, in an era dominated by a sedentary lifestyle among modern youth, confirms the validity of implementing physical activity promotion programs (including the AFA program).

Keywords: physical fitness, trends, OSF test, children, adolescents, gender

Josef Mitáš[1]
[1]Palacký University Olomouc, Czech Republic

FINDINGS FROM THE IPEN ADULT STUDY – BUILT ENVIRONMENT AND PHYSICAL ACTIVITY

Background:
Physical inactivity has escalated to a global pandemic, contributing to over 5 million deaths annually across high-, middle-, and low-income countries. Existing physical activity (PA) guidelines and interventions have produced limited and often inequitable outcomes. To drive population-level changes, ecological models that simultaneously target individuals, social networks, physical environments, and policies must be implemented, which has become a research priority, particularly in developed countries. Behavior is increasingly understood as the product of person–environment interactions that influence active living. Emerging evidence highlights the critical role of urban planning in designing activity-supportive neighborhoods. Specifically, elements such as mixed-use development have been consistently associated with higher levels of PA, with far-reaching social, health, and economic impacts.

Methods:
The International Physical Activity and the Environment Network (IPEN) study included 6822 adults aged 18–66 years across 12 countries. Environmental attributes such as walkability, public transport access, and park accessibility were assessed alongside mean daily minutes of moderate-to-vigorous-intensity PA. Associations between environmental attributes and PA were estimated using generalized additive mixed models.

Results:
Four of six environmental attributes showed significant, positive, linear associations with PA: net residential density (1·006 [95% CI 1·003–1·009]; p=0·001), intersection density (1·069 [1·011–1·130]; p=0·019), public transport density (1·037 [1·018–1·056]; p=0·0007), and number of parks (1·146 [1·033–1·272]; p=0·010).

Conclusion:
Strategic urban design interventions have the potential to increase residents' PA by approximately 90 minutes per week—equivalent to 60% of the globally recommended 150 minutes. To achieve this, international pooled analyses recommend that public health agencies integrate active living strategies into routine practice, collaborating with sectors such as urban planning, environmental sustainability, and local community organizations. Cross-sectoral efforts can simultaneously promote PA, reduce energy consumption, lower greenhouse gas emissions, and achieve broad health and economic gains.

Keywords: urban environment; active living; co-creation; monitoring; behavior change

Kaja Teraž[1,2]; Saša Pišot[1]; Katarina Puš[1]; Boštjan Šimunič[1]; Rado Pišot[1]
[1]Institute for Kinesiology Research, Science and Research Centre Koper, Slovenia;
[2]Clinical University Department of Medical, Surgical, and Health Sciences, University of Trieste, Italy

ACTIVE LIFESTYLE IN OLD AGE: THE ROLE OF PHYSICAL ACTIVITY AND NUTRITION IN PROMOTING HEALTHY AGEING.

Background:
The ageing process is associated with progressive declines in muscle mass, strength, and metabolic function, which may be mitigated through appropriate lifestyle interventions. Physical activity and dietary patterns, particularly adherence to the Mediterranean diet, are key contributors to maintaining functional capacity and metabolic health in older adults. This abstract outlines key findings on physical activity levels, body composition, and dietary habits among older adults in Slovenia.

Methods:
A longitudinal cohort study followed 52 active older adults (mean age: 68.4 ± 5.6 years, 42.3 % male) over eight years. Measurements included different functionality tests (handgrip strength, gait speed), body composition via bioelectrical impedance analysis, objectively measured physical activity with accelerometers, and nutritional habits. The second study utilised a cross-sectional observational design, encompassing 521 older adults (mean age: 69.6 ± 6.3 years, 31.1 % male) from 12 Slovenian statistical regions. Body composition and adherence to the Mediterranean diet were assessed using a validated dietary adherence questionnaire, the MEDLIFE index. A multiple linear regression was performed to assess the relationship between the body composition parameters and MD.

Results:
After eight years, participants experienced significant declines in muscle strength (−10.2%), muscle mass index (−5.4%), and gait speed (−28.6%) ($p < 0.001$). Self-reported reductions in physical activity and increases in sedentary behaviour were also noted. Despite consistently high physical activity levels across both time points (mean >10,000 steps/day), a substantial proportion of participants (47.4%) had elevated body fat percentages. These findings suggest that physical activity alone may not be sufficient to preserve favourable body composition with advancing age. Therefore, the study of Mediterranean diet adherence was conducted. The results showed that women had higher adherence to the MD ($p = .002$, $\eta P2 = .018$), and the multiple regression results to predict BIA parameters from the MEDLIFE questionnaire were significant only for females. The fat mass and/or fat-free mass model was predicted from consumption of processed meat, olive oil and snacks between meals ($F (3, 343) = 7.623$; $R = 0.250$; $R2 = 0.063$; $p < 0.001$).

Conclusion:
These findings underscore the complex interplay between physical activity, dietary patterns, and body composition in older adults. Comprehensive, multidimensional approaches that integrate structured physical activity and evidence-based nutritional strategies are essential for promoting healthy ageing.

Keywords: healthy ageing, physical activity, Mediterranean diet, older adults, body composition

Larissza Tóth[1], Ferenc Győri[1,2]
[1]Institute of Physiotherapy and Sports Science, University of Pécs, Pécs, Hungary
[2]Research Institute, Gál Ferenc Universityof, Szeged, Pécs, Hungary

THE IMPACT OF PHYSICAL ACTIVITY ON THE MENTAL HEALTH AND ACADEMIC PERFORMANCE OF HUNGARIAN UNIVERSITY STUDENTS

Background:
In higher education, students face considerable physical and mental challenges, making it increasingly important to explore factors that contribute to maintaining mental health and supporting academic performance. The aim of this study was to examine the impact of physical activity on the mental well-being, perceived stress, resilience, and academic achievement of university students in Hungary.

Methods:
This cross-sectional quantitative research was conducted using an online questionnaire completed by 234 university students. The data collection applied validated instruments, including the IPAQ, WBI-5, PSS-14, and MET scales. Data analysis was performed using SPSS 29.0, applying descriptive and inferential statistical methods.

Results:
The results showed a statistically significant positive relationship between regular physical activity and mental well-being: students who exercised two to three times a week reported higher WBI-5 scores than their less active peers. Although lower perceived stress and higher resilience levels were observed among more active students, these differences were not statistically significant. No significant association was found between physical activity and academic performance. Based on the MET scale, students demonstrated strong psychological resources, especially in the domains of well-being and executive effectiveness.

Conclusion:
The findings of this study may contribute to the development of more targeted student health promotion programs, particularly in the areas of physical activity and mental well-being. Further research—especially longitudinal or qualitative in nature—is recommended to confirm the observed trends and explore underlying mechanisms.

Keywords: physical activity, mental health, university students, stress, resilience, academic performance

László Attila Krutek[1], Pongrác Ács[2]
[1] University of Pécs, Faculty of Health Sciences, Doctoral School of Health Sciences
[2] University of Pécs, Faculty of Health Sciences

POWER LOCKED IN MOMENTUM

Introduction:

A pendulum has its historical and basic importance. Since Galilei it can be an accurate and simple timekeeper and, in the hands of Newton, resulted in the first evidence that inertial and gravitational masses are proportional. It has a rich variety of physics involved when the ideal pendulum is compared to a real experiment. The goal of the study was to create a system and a tool for elite athletes that applies all forces having observed in a simple pendulum motion to gain explosive power in strength training.

Methods:

In the first experiment we used a 16 kg suspended kettlebell to create a pendulum. An elastic band was inserted between the athlete and the weight, and started the movement, moving the mass out of its equilibrium position. As the kettlebell was moving away, the athlete had to interact by holding the elastic and took over the force coming from the elastic and from the weight. At the point of zero movement and maximum tense of the elastic (net force), the athlete interacts by a concentric muscle contraction gaining speed for the kettlebell which is supplied by the potential energy of the elastic band transforming into kinetic energy. In the second test, we connected the elastic to a cable tower machine, where the weight was moving up and down, perpendicular to the ground. In this experiment, we had a similar oscillation of a mass on a spring when it is subject to the linear elastic restoring force. In this case we could use the benefits of the acceleration towards the ground. We inverted the relations one can observe in a simple harmonic motion (SHM).

Results:

We generated a system that applies eccentric overload and has an increased need of stability during execution.

Discussion:

Professional athletes, canoeists, swimmers, cyclists, handball and water-polo players, as well as patients with spondylosis use both pendulum and SHM system in the gym to increase explosive power, to gain trunk stability, to have a better muscular lock and sustain for the spine and prevent injury.

Keywords: mechanics, Newton's second law, oscillation, explosive power, plyometric contraction, momentum, acceleration

Marian J. Stelmach[1], Joanna Baj-Korpak[1], Ewelina Niźnikowska[1], Barbara Bergier[1], Michał Bergier[1], Dorota Tomczyszyn[1], Paulo Rocha[2]
[1]John Poul II University in Biała Podlaska, Poland
[2]Instituto Português do Desporto e Juventude, Lisbon, Portugal

CORRELATES OF SEDENTARY BEHAVIORS AMONG ADULTS FROM EASTERN POLAND

Background:
Research on sedentary behaviors in the Polish population using objective methods, such as accelerometry, remains limited. These behaviors, defined as time spent on passive activities or minimal physical effort, require further investigation. This study aimed to identify socio-demographic and health-related correlates of sedentary behaviors in a cohort of adults from eastern Poland.

Methods:
A total of 173 adults from eastern Poland participated in the study. Socio-demographic data were collected using the EHIS (wave 3) questionnaire. Movement behaviors were monitored for seven days using a triaxial accelerometer RM42. Statistical analyses included Spearman's correlation for ordinal and quantitative variables, the Mann-Whitney U test for two-group comparisons, and the Kruskal-Wallis test for multiple-group comparisons.

Results:
Participants spent an average of 8 hours and 34 minutes per day in sedentary behaviors, with a mean daily step count exceeding 8,000. Linear regression analysis showed that the model explaining sitting/lying time accounted for only 1.9% of the variance, whereas employment status was the most significant predictor, explaining 11.8% of the variance.

Conclusion:
Self-rated health, gender, employment status, and marital status were the strongest correlates of sedentary behavior. Unemployment—including unemployed individuals, students, retirees, and those dependent on others—was most strongly associated with prolonged sitting and a lower step count.

Keywords: Adults, Accelerometer measurements, Eastern Poland, Physical activity, Sedentary behaviors

Megha Sharma[1], Dr. Zsolt Káposztás[2], Dr. Adrienn Biró[2]
[1]Faculty of Health Sciences, University of Pécs, Hungary
[2]Mór Kaposi Teaching Hospital, Kaposvár.

THE EFFECT OF EXERCISE ON THE QUALITY OF LIFE AND SURVIVAL AMONGST PATIENTS WITH GASTROINTESTINAL CANCER.

Background:
Gastrointestinal cancers represent a significant portion of cancer cases globally, comprising a high percentage of the total, and they are responsible for 35 percent of all cancer-related fatalities. This project investigates the intricate relationship between physical activity, complications, and survival rates among patients diagnosed with GI cancer.

Methods:
The focus was on patients diagnosed with GI cancer, particularly colorectal cancer. Data collection was done using the Medsol system and patient assessments. Statistical analysis was conducted utilizing Microsoft Excel and SPSS. The project used various statistical methods, including descriptive analysis, independent t-test, Chi-square test, ANOVA, and Pearson's correlation test.

Results:
Data was collected from 58 GI cancer patients; the mean age was 65.16 ± 10.9 years. The participants were differentiated based on their participation in the prehabilitation program, out of which 23 patients took part. The results demonstrated that patients who received preoperative physiotherapy (n=23) had a significantly ($p<0.001$) shorter length of stay (LOS) with a mean value of 5.87 ± 1.46 days, compared to those who did not receive preoperative physiotherapy (n = 35, mean = 10.31 ± 5.16 days). A significant result ($p=0.002$) also demonstrated that patients who participated in the prehabilitation program were significantly less likely to experience postoperative complications.

Conclusion:
The findings indicated that incorporation of prehabilitation program in the treatment plan of GI cancer patients can significantly reduce postoperative complications and shorter stay in the hospital.

Keywords: Gastrointestinal cancer, Exercise, Length of Stay, Quality of life, Complications.

Melese Dereje Mesfin[1], Dahabo Adi Galgallo[1], Leman Atmaca[1], Viktória Prémusz[1]
[1]Doctoral School of Health Sciences, Faculty of Health Sciences, University of Pécs, Pécs, Hungary

ASSISTED REPRODUCTIVE TECHNOLOGY IMPLICATIONS FOR INFERTILITY CLIENTS IN DEVELOPING COUNTRIES: SYSTEMATIC REVIEW

Background:
Involuntary childlessness is viewed as a serious life issue with long-term effects, and it has a significant negative psycho-social impact in a country where almost every society is highly pronatalist. Many issues and obstacles come to light while discussing the role of Assisted reproductive technology in developing nations. A systematic review was conducted to understand the implications of assisted reproduction for infertility clients in developing countries and the factors influencing it.

Methods:
After the protocol was registered and published with the International Prospective Register of Systematic Reviews (PROSPERO), A comprehensive search was performed using predefined keywords across major electronic databases, such as PubMed, Ovid MEDLINE, EMBASE, Google Scholar, and Web of Science. Three reviewers independently examined the studies and Narrative analysis was used for result presentation.

Results:
An extensive review of databases resulted in 3097 citations; A full text review was conducted on the 137 articles, and finally 43 studies were included for final analysis. The commonly mentioned factors were the high costs associated with treatment, followed by accessibility and infrastructural obstacles, psychosocial cultural pressures towards infertility clients and low acceptance of ART born babies was also another challenge were among other hindrances towards utilization of medically assisted reproduction.

Conclusion:
Governmental and international organizations should support assisted reproduction services to address the challenges of affordability and accessibility. In addition, it is essential to incorporate psychosocial support into fertility treatment and create supportive policies, strategies, and regulations to tackle major obstacles.

Keywords: Assisted reproductive technology, Invitro fertilization, developing countries

Norbert Fóris[1], Melani Kimberli Hunyadi[1], Bence Cselik[1]
[1]FI 58544

FROM HOBBY TO HIGH-PERFORMANCE: HEALTH BEHAVIORS OF AMATEUR VS. PROFESSIONAL E-ATHLETES

Background:
The aim of the research was to explore the health behaviors of e-athletes, with a particular focus on their physical activity, nutrition, sleep habits, and subjective health perception. The study sought to provide a comprehensive overview of the lifestyle of Hungarian e-sports players by comparing the habits of gamers at different levels of play, serving as a foundation for future research.

Methods:
The cross-sectional study was based on an anonymous self-administered questionnaire completed by hobby, amateur, and professional e-sports players over the age of 18 (n=340). Convenience sampling was used between November 2024 and January 2025. Data were analyzed using descriptive statistics, Chi-square tests, and independent samples t-tests. Relationships between weekly time spent on e-sports and BMI, level of physical activity, and sleep duration were examined. Eating and hydration habits were compared to national averages and international recommendations.

Results:
The majority of respondents were male (238 individuals), and most played e-sports at a hobby level (144 individuals). Weekly time spent on e-sports showed a negative correlation with BMI ($p = 0.044$), physical activity levels ($p = 0.037$), and sleep duration ($p = 0.0029$). Among respondents aged 18–34, both men and women consumed less fruits and vegetables than the daily recommended amounts (women: 33.46%, men: 21.82%). Daily fluid intake also fell short of EFSA recommendations (women: 43.61%, men: 41.26%).

Conclusion:
The results highlighted several challenges in the health behaviors of e-athletes. This research may serve as a foundation for further studies and emphasizes the need to strengthen health awareness within the e-sports community.

Keywords: e-sports, health behaviors, nutrition, physical activity

Pongrác Ács[1]
[1]University of Pécs, Faculty of Health Sciences

PHYSICAL ACTIVITY PATTERNS AMONG HIGH SCHOOL AND UNIVERSITY STUDENTS IN THE V4 COUNTRIES

Introduction:
This study investigates the physical activity patterns of young people in the Visegrád Four (V4) countries—Hungary, Poland, Slovakia, and the Czech Republic. The research compares physical activity levels between secondary school and university students and explores the influence of socio-economic status, family background, and school environment. The overarching goal is to identify best practices and inform future educational and health promotion strategies across Central Europe.

Methods:
A cross-sectional design with quota sampling was applied, based on age, gender, and educational status. The sample comprised 300 secondary school students and 500 university students (including 50 with objective measurements). Inclusion criteria included age 15–29, active student status, and native-level language proficiency. Subjective data were collected via validated questionnaires (e.g. IPAQ-L, PAHCO, BRIEF), alongside items on sport habits, sleep, and digital media use. Objective physical activity data were measured using ActiGraph wGT3X-BT devices.

Results:
Between 2015 and 2025, the proportion of secondary school students meeting the WHO guideline of 60 minutes of daily physical activity increased from 19.6% to 26.1%, with the highest compliance in Poland. Regarding sedentary behaviour, 17.9% of university students exceeded 8 hours of daily sitting in 2015, and this remained virtually unchanged in 2025 (17.8%). Notably, Hungary showed marked improvement. The proportion of students meeting both WHO recommendations increased from 38% to 39.3%. However, a high-risk group—those failing both criteria—increased slightly to 11.3%, with Poland showing the highest risk.

Conclusion:
The findings indicate positive trends in youth physical activity, yet highlight persistent risks related to sedentary behaviour, particularly in university settings. Coordinated action is needed across V4 countries to sustain improvements and address behavioural disparities among subgroups.

Keywords: physical activity, youth, V4 countries, sedentary behaviour, university students, health literacy

Radenko M. Matić[1]
[1]Faculty of Sport and Physical Education, University of Novi Sad, Serbia

PHYSICAL ACTIVITY MESSAGING RECOMMENDATIONS FOR DIFFERENT GROUPS: CHILDREN AND YOUNG PEOPLE

Background:
The main aim of this study is to analyze the social context, children's environment, health outcomes, and risk behaviors of school-aged children relevant to encouraging and promoting their socio-culturally active lifestyles.

Methods:
Data collection included a sample of parents of school-aged children from the Vojvodina region (N = 2430). The system of variables is oriented towards the inclusion of three dimensions (constructs): social characteristics of respondents - parents and children; the level and forms of physical activity of parents and children; and the level and forms of aberrant behavior of children. The core of the theoretical model was the hypothesis about the connection between children's risky behavior and the lifestyle adopted during children's development until adolescence. Structural equation modeling ran regression paths among all variables for examination of direct, indirect, and total effects.

Results:
The main findings of the statistical analysis revealed the mediator role of the family in reducing the level of risk behavior ($\beta = 0.24$). Parents, in their support for the development of an active lifestyle, make assumptions about such lifestyles of children and young people. Further, the physical activity and sports results of parents significantly contribute to the physical activity of their children. The physical activity of children has a feedback effect on the physical activity of their parents.

Conclusion:
The risk behavior of children and young people is determined by their inactive lifestyles. An adequate strategy for promoting positive aspects of an active lifestyle lies in mixed engagement from the micro (family) to the community (macro) level, as well as considering the poverty index.

Keywords: lifestyle, risky behavior, family, peers, sports, community.

Rizky Nurulfa[1], Csaba Melczer[2], Aija Klavina[3], Nur fitranto[4], Eko Prabowo[5], Sri Indah Ihsani[6]
[1]University of Pecs, Universitas Negeri Jakarta
[2]University of Pécs
[3]Riga Stradins University
[4]Universitas Negeri Jakarta

"EXPLORING THE CORRELATION BETWEEN PHYSICAL ACTIVITY, SLEEP BEHAVIOR, AND EATING HABITS AMONG ADOLESCENTS IN INDONESIA"

Background:
Adolescence is a critical period for the development of healthy habits. However, many individuals encounter challenges such as insufficient physical activity, poor sleep, and unhealthy eating patterns. These factors are closely associated with mental, physical, and academic outcomes. These behaviors are interconnected and have a substantial impact on long-term health and well-being. The repercussions of COVID-19 in Indonesia have precipitated alterations in activity patterns, rest, and food consumption habits.

Methods:
This cross-sectional study was conducted on junior high school students in Jakarta by distributing PAQ-A, Sleep Behavior, and Adolescent Food Habits questionnaires through Google Forms. Data collected as many as 320 students filled out the questionnaire completely.

Results:
A positive correlation has been demonstrated between regular physical activity and optimal sleep quality, as well as healthy eating habits. However, a negative relationship has been observed between tardiness and nocturnal snack consumption, as well as between tardiness and the omission of breakfast in the morning among adolescents.

Conclusion:
Regular physical activity among adolescents has been linked to more consistent sleep schedules and healthier dietary choices. This suggests that maintaining a regular exercise routine may contribute to healthier overall health behaviors.

Keywords: Physical Activity, Sleep Behavior, Eating Habits, Adolescent

Saša Pišot[1], Kaja Teraž[1,2], Boštjan Šimunič[1], Rado Pišot[1]
[1]Institute of kinesiology research, Science and research center, Koper, Slovenia
[2]Clinical University Department of Medical, Surgical, and Health Sciences, University of Trieste, Italy

ACTIVE LIFESTYLE MATTERS: A LONGITUDINAL PERSPECTIVE ON BEHAVIORAL DETERMINANTS IN OLDER ADULTS

Background:
Understanding the behavioral factors that influence healthy aging is essential as populations grow older. The findings from an eight-year longitudinal study focused on physically active older adults, exploring how behavioral determinants shape physical activity patterns, self-perceived health, and quality of life over time.

Methods:
We conducted a longitudinal study of older adults from in 2013 and than in 2021. At baseline, 149 participants were enrolled; after eight years, 52 remained (mean age 68.4 ± 5.6). The high attrition rate was due to mortality (n = 13) and non-response (n = 84). Physical activity (PA) and sedentary behavior (SB) were assessed at both time points using the validated Global Physical Activity Questionnaire (GPAQ), alongside socio-demographic, environmental, and self-perceived well-being measures. An explanatory mixed-methods design was applied. In the first phase, quantitative data were analyzed using paired sample t-tests, Wilcoxon signed-rank tests, and Chi-square analysis. In the second phase, semi-structured interviews were conducted to explore participants' subjective experiences of health and activity-related changes over the eight-year period.

Results:
Both genders reported reduced SB and met healthy lifestyle criteria for self-reported PA (>3000 MET-min/week). Compared to baseline, both genders reported significantly better health, fitness, well-being, and quality of life ($p < .01$); men also showed greater health awareness ($p = .046$). The qualitative data confirmed changes in PA over the eight-year period. Participants continued engaging in routine physical tasks such as gardening and working in vineyards. However, organized PA s that previously helped reduce SB were largely replaced by walking, particularly in natural environments.

Conclusion:
Despite a natural decline in PA with age, participants maintained relatively low levels of SB, often substituting organized exercise with daily tasks and walking. Both quantitative and qualitative data reveal that sustained PA in active lifestyle contribute significantly to well-being in later life.

Keywords: older adults, ageing, physical activity, behavour determinants, quality of life.

Szabolcs Halasi [1]
[1]University of Novi Sad

PREVENTIVE HEALTH BEHAVIOR OF SCHOOL-AGE CHILDREN IN HUNGARY AND SERBIA: FOCUS ON OBESITY

The aim of the study was to examine and compare the structure, content, and health education roles of physical education programs within the formal education systems of Hungary and Serbia, with a particular emphasis on childhood obesity. In contemporary society, children and adolescents are increasingly affected by unhealthy lifestyle habits, including poor nutrition and physical inactivity, which contribute to the growing prevalence of overweight and obesity in both countries. Through a comparative analysis of curricula, regulatory frameworks, and health development strategies, this study highlights similarities and differences in national approaches to promoting healthy behavior and physical fitness in school settings.

The study presents a comprehensive overview of anthropometric and epidemiological data, illustrating the alarming trends of childhood obesity rates in both nations. It discusses how health behaviors formed in early life significantly influence the prevention of chronic diseases in adulthood. The research underscores the crucial role of schools, alongside families, in fostering health-conscious habits and integrating physical activity into children's daily routines. Furthermore, it outlines effective health-promotion practices that can be implemented with minimal financial investment, focusing on the importance of a balanced daily rhythm, regular physical exercise, healthy nutrition, and mindful digital device usage.

The findings suggest that Hungary's implementation of daily physical education since 2012 has yielded more stable trends in children's fitness levels compared to Serbia, where weekly physical education hours remain lower. The thesis advocates for enhanced, holistic, and multidisciplinary health promotion strategies, emphasizing collaboration among families, schools, and public health authorities to combat childhood obesity and improve children's overall well-being in both countries.

Keywords: health education, children, Serbia, Hungary.

Tamas Beregi[2], Viktória Prémusz[1,2], Alexandra Makai[1,2], Hollósy Eszter[2], Pongrác Ács[1]
[1]University of Pécs, Faculty of Health Sciences
[2]University of Pécs, Faculty of Health Sciences, Doctoral School of Health Sciences

MOVE MORE, SLEEP BETTER: EXPLORING KEY PREDICTORS OF SLEEP QUALITY AMOUNG YOUNG ADULTS IN V4 COUNTRIES

Background:
Sleep is a fundamental component of physical and mental health, influencing cognitive performance, emotional regulation, and overall quality of life. Poor sleep quality has been associated with increased risk of chronic conditions such as cardiovascular disease, depression, and obesity. Physical activity is widely recognized as a protective factor for sleep disturbances, while subjective well-being and perceived health status are also known to shape sleep experiences. Understanding how these interconnected lifestyle and psychological factors relate to sleep quality is essential for designing effective health promotion strategies, particularly in cross-cultural contexts. This study explores how physical activity frequency, self-rated health, and life satisfaction relate to perceived sleep quality among individuals from V4 countries.

Methods:
The study was based on data collected from a total of 4,538 respondents aged 18–29 years across the Visegrád Four (V4) countries: Hungary (n=1,422), Czech Republic (n=804), Poland (n=797), and Slovakia (n=1,515). Participants reported how many days per week they engage in physical activity (0–7 days), rated their perceived sleep quality on a 1–5 scale, self-rated health on a 1–5 scale, and overall life satisfaction using a 0–10 scale. Descriptive statistics and group comparisons were applied to examine trends, and statistical significance was tested using $p<0.001$ as the threshold.

Results:
A significant relationship was found between physical activity and sleep quality ($p<0.001$). Interestingly, individuals exercising 0 or 1 day/week reported better sleep quality (3.51 and 3.32) than those exercising 2–6 days/week (average ~3.34). The highest sleep quality was observed among those active 7 days/week (3.54). Sleep quality also declined as self-rated health worsened: from 3.8 ("Excellent" health) to 2.91 ("Poor" health). A similar gradient emerged with life satisfaction: individuals rating their life as "10" reported the highest sleep quality (3.77), while those at "0" reported the lowest (2.14) ($p<0.001$).

Conclusion:
There is a strong association between physical activity, perceived health, life satisfaction, and sleep quality. Interestingly, those who engage in physical activity only 0–1 day per week report higher sleep quality than those who exercise 2–6 days per week. However, from two days of activity onwards, sleep quality gradually improves, reaching its peak among those who are active every day. Daily exercise, positive health perception, and higher life satisfaction all contribute to improved sleep quality. To enhance sleep, interventions should encourage regular physical activity and support psychological well-being.

Keywords: sleep quality, physical activity, self-rated health, life satisfaction, mental well-being

Vera Logan Kuchařová[1]
[1]Jihočeská Univerzita, České Budějovice, Czechia

SCREEN TIME VERSUS ACTIVE TIME - INTERIM DATA FROM A V4MORE STUDY (CZECH REPUBLIC)

Background:
Gaming disorder and problematic social media use are increasingly recognized as threats to young people's physical and mental well-being. These behaviors are associated with reduced physical activity, sleep disturbances, poor dietary habits, and increased symptoms of anxiety and depression, all of which negatively impact overall quality of life. Vulnerabilities such as impulsivity, emotional dysregulation, and social isolation are compounded by digital environments designed to maximize user engagement.

This presentation offers interim data from a Czech survey, focusing on the relationship between gaming disorder, problematic social media use and sedentary lifestyles and psychosocial outcomes in youth.

Methods:
TBA

Results:
TBA

Conclusion:
TBA

Keywords: young people, screen time, physical activity

Zuzana Küchelová[1], Erika Liptáková[2], Ferdinand Salonna[1]
[1]Pavol Jozef Šafárik University in Košice, Institute of Physical Education and Sports
[2]Technical University of Košice, Department of Applied Mathematics and Economic Informatics

PHYSICAL ACTIVITY AND LIFESTYLE AWARENESS AMONG ONCOLOGICAL PATIENTS

Background:
Non-communicable diseases, including cancer, cause millions of deaths annually among individuals aged 30-70. While lifestyle is not the sole factor in cancer development, adopting an active lifestyle with regular physical activity can significantly improve patient prognosis and reduce the risk of recurrence. Our aim was to determine the level of physical activity performed by patients with oncological diseases and to provide insights into how physical activity impacts their quality of life.

Methods:
We conducted a study with 102 oncological patients from Eastern Slovakia, using a paper-and-pen survey. An adapted version of the International Physical Activity Questionnaire (IPAQ) was employed to assess their physical activity levels, along with various aspects of an active lifestyle. The sample was divided into active and non-active groups based on the WHO recommendation of 600 MET-minutes as the cut-off point for adequate physical activity.

Results:
In the female group, we found a significantly higher level of physical activity compared to males. We observed no differences between active and inactive oncological patients in terms of smoking, alcohol consumption, education, employment, duration of illness, physician-provided information on appropriate physical activity, awareness of the importance of physical activity, and awareness of the minimum physical activity requirements.

Conclusion:
Our findings suggest a gender-specific approach may be needed, as females were more physically active than males. The lack of differences in lifestyle factors between active and inactive patients indicates that most are likely well-informed about necessary lifestyle changes. However, further research is needed to assess actual lifestyle behaviors among cancer patients.

Keywords: Oncological patients, physical activity, gender differences, active lifestyle, quality of life, lifestyle behaviors

Zsófia Kovács-Szabó[1],Viktória Prémusz[1,2], Alexandra Makai[1,2], Márta Hock[1,2]
[1]Pécsi Tudományegyetem, Egészségtudományi Kar, Fizioterápiás és Sporttudományi Intézet
[2]Pécsi Tudományegyetem, Szentágothai Kutatóközpont, Fizikai Aktivitás Kutatócsoport

QUALITY OF LIFE AND PHYSICAL ACTIVITY IN HUNGARIAN WOMEN WITH ENDOMETRIOSIS: A CROSS-SECTIONAL STUDY

Background:
This study aimed to assess the quality of life and physical activity levels in Hungarian women diagnosed with endometriosis.

Methods:
A cross-sectional study was conducted between April and June 2023 using a convenience sample of women aged 18–47 with diagnosed endometriosis. Data collection tools included a self-designed questionnaire, the Visual Analogue Scale (VAS), the SF-36 Health Survey, the Global Physical Activity Questionnaire (GPAQ), the Perceived Stress Scale (PSS), the Pain Catastrophizing Scale (PCS), and the Pelvic Pain Impact Questionnaire (PPIQ). Statistical analyses were performed using IBM SPSS 28.0. Spearman correlation and independent samples t-tests were used; significance was set at $p < 0.05$.

Results:
A total of 262 participants were included, with a mean age of 34.39 ± 6.68 years and a mean BMI of 23.22 ± 5.61, primarily within the normal range. Quality of life scores, as measured by the SF-36, were significantly lower in all dimensions compared to Hungarian population norms ($p < 0.001$). High perceived stress levels were reported by 72% of the sample. Regarding physical activity, 51% of participants reported rarely or never engaging in exercise. Among those participating in recreational physical activity, the average weekly duration was 49.75 minutes for vigorous and 72.6 minutes for moderate-intensity activity. Participants spent an average of 454.56 minutes per day sitting.

Conclusion:
Women with endometriosis in Hungary report significantly lower quality of life and high levels of perceived stress. Additionally, physical activity levels are low, with a substantial portion of the sample being inactive. Further studies are required about the effect of an active lifestyle in this population.

Keywords: Endometriosis, quality of life, physical activity, perceived stress