

## PHYSICAL ACTIVITY PATTERNS AMONG HIGH SCHOOL AND UNIVERSITY STUDENTS IN THE V4 COUNTRIES: A COMPARATIVE STUDY

### WZORCE AKTYWNOŚCI FIZYCZNEJ WŚRÓD UCZNIÓW SZKÓŁ ŚREDNICH I STUDENTÓW W KRAJACH V4: BADANIE PORÓWNAWCZE

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#### Authors' contribution

#### Wkład autorów:

- A. Study design/planning zaplanowanie badań
- B. Data collection/entry zebranie danych
- C. Data analysis/statistics dane – analiza i statystyki
- D. Data interpretation interpretacja danych
- E. Preparation of manuscript przygotowanie artykułu
- F. Literature analysis/search wyszukiwanie i analiza literatury
- G. Funds collection zebranie funduszy

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#### Dear Editor,

Insufficient levels of physical activity are a significant contributor to chronic non-communicable diseases such as diabetes, obesity, and cardiovascular disease [1-3]. Recommendations from the World Health Organization [4] include both general guidelines and activity recommendations specific to age, pregnancy, disease, and disability to help maintain good health and fitness. Assessing physical activity levels, as well as researching its correlates and determinants, is essential for understanding why people are physically active or inactive. This, in turn, contributes to evidence-based planning of public health interventions [1].

The Faculty of Health Sciences of University of Pécs (Hungary) in collaboration with distinguished representatives from the Visegrad countries, has secured a grant of EUR 33,197 from the International Visegrad Fund for the project titled *Physical Activity Patterns Among High School and University Students in the V4 Countries – A Comparative Study* (No. 22420149; V4MoRe: V4 Movement Research; Project Leader: Prof. Dr. Pongrác Ács, University Professor, Dean). The project will be conducted in partnership with John Paul II University in Biała Podlaska (Poland), Pavol Jozef Šafárik University in Košice (Slovakia) and University of South Bohemia in České Budějovice (Czech Republic).

**Keywords:** V4 project, comparative study, physical activity, high school, students

**Słowa kluczowe:** projekt V4, badanie porównawcze, aktywność fizyczna, szkoła ponadpodstawowa, studenci

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This project builds on the previous joint research initiative conducted in 2015, which aimed to integrate researchers from the V4 countries into a unified research effort, thereby strengthening scientific collaboration among the four partner institutions. The outcomes of the previous study highlighted the importance of health awareness and individual responsibility for health among the youth populations in the V4 countries [5-7]. Our earlier research also underscored the necessity of regularly monitoring physical activity patterns and the importance of validating and ensuring the reliability of the research tools. Over the past years, we have continued to monitor physical activity across various populations, including children and adults (through the EUPASMOS project), and during the pandemic period as well.

Building on the experiences of the previous study and by revisiting and expanding the topic, we aim not only to strengthen scientific collaboration among researchers but also to track changes in physical activity over a ten-year period by re-examining the young target group.

The project, which started on October 1, 2024, with a duration of 18 months, will involve the survey of physical activity habits among a total of 1,200 high school students and 2,000 university students across the four participating V4 countries. Additionally, 200 university students will undergo physical activity measurement using the ActiGraph GT3X device, an objective tool for assessing physical activity. Beyond measuring physical activity, the forthcoming study will also investigate time spent sitting and sleeping, the health-related quality of life of young people, their sports participation habits, and their knowledge related to physical activity.

The primary objective of this study is to compare the international results from the V4 countries, juxtapose the newly collected data with the findings from ten years ago and explore the relationships between the studied parameters for a detailed analysis of physical activity behavior. The results will be disseminated through international publications and a scientific conference will be held at the conclusion of the project to discuss and disseminate the findings. This conference will provide an opportunity for the research community to engage directly with the researchers involved in the project, discuss the practical applications of the findings, and explore the potential for developing programs that encourage physical activity among at-risk groups.

We consider it essential to broadly communicate our results, not only to professional audiences but to the wider public. We believe that our findings will provide valuable insights into the role of physical activity in health, leading to positive practical changes. For the young target group, we will prepare informative materials containing significant and useful information, which will be delivered to them through the media channels they frequently use.

With this project, we wish to honor the memory of Professor Józef Bergier, the former rector of John Paul II University in Biała Podlaska (Poland), who, as the leader of the project ten years ago, used his scientific expertise and excellent community-building skills to organize researchers from the four countries into a cohesive research group, laying the groundwork for our long-term collaboration.

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