The Impact of Physical Activity on the Mental Health of University Students

Dino Plodinec

University of Zagreb
Faculty of Organization and Informatics
Pavlinska 2, 42000 Varaždin, Croatia
dplodinec22@student.foi.hr

Abstract. *University students are increasingly exposed to academic demands that may negatively affect their mental health and overall well-being. At the same time, regular physical activity is widely recognized as an effective way to reduce stress, improve mood, and promote psychological well-being. The aim of this study was to examine the relationship between physical activity and mental health among students of the Faculty of Organization and Informatics, University of Zagreb. The study included 85 undergraduate and graduate university students who voluntarily completed an anonymous online questionnaire. The questionnaire consisted of demographic questions and statements related to physical activity, academic stress, motivation, and mental well-being, assessed using a five-point Likert scale. Descriptive statistics and the chi-square (χ^2) test were used to analyze the collected data. The results indicated no statistically significant association between study level and students' perceptions of academic stress, lack of time for physical activity, or preference for rest after a demanding academic day. However, a statistically significant association was identified between gender and perceived academic stress, with female students reporting higher stress levels than male students. These findings are consistent with recent research highlighting gender differences in university students' mental health. The study is limited by the relatively small sample size and the inclusion of students from a single higher education institution, which limits the generalizability of the findings. Nevertheless, the results provide valuable insights into the relationship between physical activity and mental health and may support universities in developing initiatives that encourage physical activity, promote healthy lifestyles, and strengthen students' psychological well-being.*

Keywords. physical activity, mental health, university students, academic stress, psychological well-being

Acknowledgments

The author would like to express sincere gratitude to the research supervisor for continuous guidance, valuable suggestions, and support throughout this study. The author also thanks the Faculty of Organization and Informatics, University of Zagreb, for supporting this research. Finally, sincere appreciation is extended to all students who voluntarily participated in the survey.

References

Božurić, A., & Briševac, M. (2025). *The impact of physical activity on quality of life and mental health*. *Zdravstveni glasnik, 11*(2), 109–116. https://doi.org/10.47960/2303-8616.2025.2.11.109

Glavaš, D., Šakić Velić, M., & Grubor, P. (2026). *Physical activity and mental well-being among university students: The role of beliefs in the mental health benefits of physical activity*. *Healthcare, 14*(7), 955. https://doi.org/10.3390/healthcare14070955

Jurić Vukelić, D., & Perkov, I. (2025). *Mental health of university students in Croatia*. *Pannoniana, 9*(1), 9–23. https://doi.org/10.32903/p.9.1.1

Lorger, M., & Kudek Mirošević, J. (2025). *Doživljaj kvalitete života studenata tijekom izvanrednih životnih okolnosti izazvanih pandemijom bolesti COVID-19*. *Nova prisutnost, 23*(2), 339–354.

Talapko, J., Perić, I., Vulić, P., Pustijanac, E., Jukić, M., Bekić, S., Kotris, I., Pavlinac Dodig, I., & Škrlec, I. (2021). *Mental health and physical activity in health-related university students during the COVID-19 pandemic*. *Healthcare, 9*(7), 801. https://doi.org/10.3390/healthcare9070801

Vidović, S., Drenjančević, I., Kolar, M., Dabić, G., Oršolić, M., Degmečić, D., Zibar, L., Labak, I., & Heffer, M. (2025). *High prevalence of depression, anxiety, and stress among students in Croatia after the COVID-19 pandemic: A possible association with sleep quality and physical activity*. *Psychiatria Danubina, 37*(3), 344–352. https://doi.org/10.24869/psyd.2025.344