In-depth Analysis of the Impact of Physical Activity on Student Mental Health in an International Environment

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Abstract. *University students participating in international mobility programs, such as Erasmus+, encounter elevated levels of stress, anxiety, and social isolation due to the need to adapt to new cultural and academic environments. While the positive effects of physical activity on mental health are well-documented in general, its role within the context of international student mobility remains underexplored.*
This study examines the relationship between physical activity and mental well-being among international students, with a particular focus on Erasmus+ participants. Data were collected through an online survey (n = 85) combining Likert-scale questions with an open-ended question. Quantitative analysis included descriptive statistics, an independent samples t-test comparing short-term (≤6 months) and long-term (>6 months) students, Spearman's rank correlation, and chi-square tests. Qualitative responses were categorised into four themes using content analysis.
Results indicate that the vast majority of respondents agreed that physical activity helped reduce stress and considered it an effective tool for improving mental health abroad. Short-term students reported a significantly higher sense of belonging through physical activity compared to long-term students. Spearman's correlation revealed significant positive associations between physical activity frequency and meeting new people, as well as feeling connected to other students. No significant differences were found for mood improvement, adaptation, or intercultural communication.
These findings suggest that physical activity serves not only as a stress-management tool but also as a facilitator of social and intercultural integration among international students. Universities are encouraged to incorporate organised physical activity initiatives, particularly during the early stages of international mobility programs.

Keywords. physical activity, mental health, international students, Erasmus+, stress reduction, social integration, content analysis, survey research

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References

Ahsan, M., & Abualait, T. (2024). Investigation of the relationship between mental health and physical activity among university students. Frontiers in Psychology, 15, 1546002.

Huang, K., Beckman, E. M., Ng, N., Dingle, G. A., Han, R., James, K., Winkler, E., Stylianou, M., & Gomersall, S. R. (2024). Effectiveness of physical activity interventions on undergraduate students' mental health: Systematic review and meta-analysis. Health Promotion International, 39(3)

Vidović, S., Degmečić, D., Drenjančević, I., Labak, I., Pešikan, A., Kolak, E., Kraštek, S., & Heffer, M. (2025).Mental health and physical activity among medical students: A cross-sectional study. Psychiatry International, 6(4), 124.

Vučić, D., Vidaček Hainš, V., & Ćurković, S. (2025). The correlation of kinesiology activities and students' anxiety, depression and stress self-evaluation. TEM Journal, 14(4), 3217–3226.

Zerengok, D., Guzel, P., & Ozbey, S. (2018). The impact of leisure participation on social adaptation of international students. Journal of Education and Training Studies, 6(2), 1–9.