

How Does Physical Activity Frequency Affect Mental Health in Lithuanian Adolescents?

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Purpose: To examine the relationship between physical activity frequency and mental health among adolescents in Lithuania.

Methods: This cross-sectional study analysed data from the 2018 Lithuanian HBSC survey, including 3,124 adolescents (52.98% girls; mean age = 13.78 ± 1.66 years). Physical activity was measured as the number of days per week with at least 60 minutes of physical activity. Mental health was assessed via life satisfaction (0–10 scale) and subjective health complaints (8 items; 0–32 scale). Adjusted marginal means were obtained from generalised linear mixed models controlling for age, sex, socioeconomic status, BMI, dietary habits (i.e. consumption of fruits, vegetables, sweets, and sugary drinks), and eating patterns (i.e. frequency of breakfast consumption and family meals), with country-level variation included as a random effect.

Results: Higher frequency of physical activity was associated with lower scores on subjective health complaints (unstandardised coefficient [B] = -0.20 ; 95% confidence interval (CI) = -0.32 to -0.08). Differences in marginal means were observed from three days of physical activity (mean = 7.81; 95% CI = 7.27 to 8.35) compared to zero days (mean = 10.10; 95% CI = 8.88 to 11.33). For life satisfaction, physical activity frequency was positively associated with the outcome (B = 0.09; 95% CI = 0.06 to 0.12), with higher mean scores at six (mean = 8.21; 95% CI = 8.04–8.39) and seven days (mean = 8.15; 95% CI = 8.00–8.29) compared to one (mean = 7.47; 95% CI = 7.17–7.77) or two days (mean = 7.63; 95% CI = 7.44–7.83) of reported physical activity ($p < 0.05$).

Conclusion: The findings indicate that higher self-reported physical activity frequency is associated with more favourable indicators of mental health among Lithuanian adolescents, particularly in terms of lower subjective health complaints and higher life satisfaction. These findings highlight the need to promote regular physical activity as a public health strategy which correlates with physical and mental health. Public policies should encourage daily physical activity programmes in schools and communities to enhance youth wellbeing.

