

Urban Environment and Health Consciousness: A Comparative Study of Physical Activity, Lifestyle, and Obesity Among Reproductive Age Women in Amman and Budapest

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This comparative cross-sectional study examines the relationships between urban environmental factors, physical activity (PA), and obesity among reproductive-age women (18–45 years) in Amman, Jordan ($n = 399$) and Budapest, Hungary ($n = 401$). Using a bilingual (Arabic/Hungarian–English) survey, we assessed PA levels (vigorous, moderate, walking), built/social environmental influences, and BMI. Key findings revealed that Hungarian women had significantly higher PA levels ($t(798) = 7.97$, $p < .001$, $d = 0.56$) and lower obesity rates ($t(693.61) = -10.32$, $p < .001$, $d = 0.73$) than Jordanians. Built environment features (sidewalks, recreational access) positively predicted PA ($\beta = 0.203$ and 0.158 , respectively; $p \leq .001$), while social factors (crime, traffic) showed no significant effects. Mediation analysis confirmed PA partially mediated the environment–BMI relationship (indirect effect: $b = -0.101$, 95% confidence interval (CI) = -0.218 , -0.009). Correlations between PA domains and BMI were strongest for vigorous ($r = -0.178$) and moderate PA ($r = -0.177$). Despite non-significant city–environment interactions ($p = .544$), results underscore how urban design disparities contribute to health inequalities among adult females. These findings highlight the need for context-specific interventions to enhance activity-supportive environments, particularly in cities with limited infrastructure.



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