

# Do neighbourhood and structural features affect health literacy in Polish adolescents?

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**Abstract:** **BACKGROUND:** Developing programmes to improve adolescents' health competences defined as health literacy (HL) seems to be crucial for their current and future health. **OBJECTIVE:** To understand if living in regions with low deprivation and high social capital increases HL in adolescence. **MATERIAL AND METHODS:** The survey was conducted in the 2018 as part of the HBSC study involving 5648 Polish students aged 13-17, 47,3% boys. Adolescents' self-reported HL was measured with a brief 10-item Health Literacy for School-Aged Children (HLSAC) instrument (IJERPH, Paakkari et al. 2020). HLSAC was developed as a set of competencies to promote and sustain health (5 dimensions of HL covered, index ranged 10-40, mean  $30.64 \pm 4.55$ ). As independent variables: gender, age group, neighbourhood social capital scale (as social feature), subjective assessment of neighbourhood affluence (as structural feature), family affluence (FAS) were used. Comparison of mean HL indexes by nonparametric Kruskal-Wallis test and General Linear Model (GLM) with 2-way interactions were applied. **RESULTS:** The average HL index increases from 29.94 to 31.85 along with the neighbourhood social capital ( $p < 0.001$ ), as well as the neighbourhood affluence (from 29.26 to 31.43;  $p < 0.001$ ). A significant interaction between FAS and the neighborhood affluence ( $p = 0.004$ ) means the accumulation of risk and protective factors (HL index ranges from 26.97 to 31,64) and a much stronger protective effect of the neighborhood features in the poor families as compared to average and high FAS groups. **CONCLUSION:** Environmental features should be analyzed in research on social determinants of HL and in planning targeted interventions.

**Keywords:** health literacy, adolescents, neighbourhood

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