

Association between severity of anxiety and dietary patterns among university students

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INTRODUCTION & AIM

Evidence for the importance of nutrition for mental health is growing, yet the relationship between diet and anxiety is still less explored. The aim of this study was to assess an association between the severity of anxiety and dietary patterns among university students.

METHOD

This cross-sectional study was conducted on 304 Polish university students aged 18-26 years (74% females). Severity of anxiety was assessed with a subscale of the Depression Anxiety Stress Scale (DASS-21), including 7 items, evaluated in three categories: normal (0-3 points; reference group), mild/moderate (4-7 points), and severe (8-21 points). Dietary data were collected with the validated 72-item semi-quantitative food frequency questionnaire (72-item SQ-FFQ). Three dietary patterns (DPs) were derived using Principal Component Analysis (PCA): Prudent, Western, and Traditional. These were analysed in tertiles. The association between the analysed variables was assessed using Spearman's correlation coefficient and logistic regression analysis. ORs were adjusted for sex, age, and BMI.

CONCLUSION

Severity of anxiety was negatively associated with pro-healthy dietary pattern and positively associated with Western dietary pattern. Higher levels of anxiety can lead to unhealthy eating behaviours among university students.

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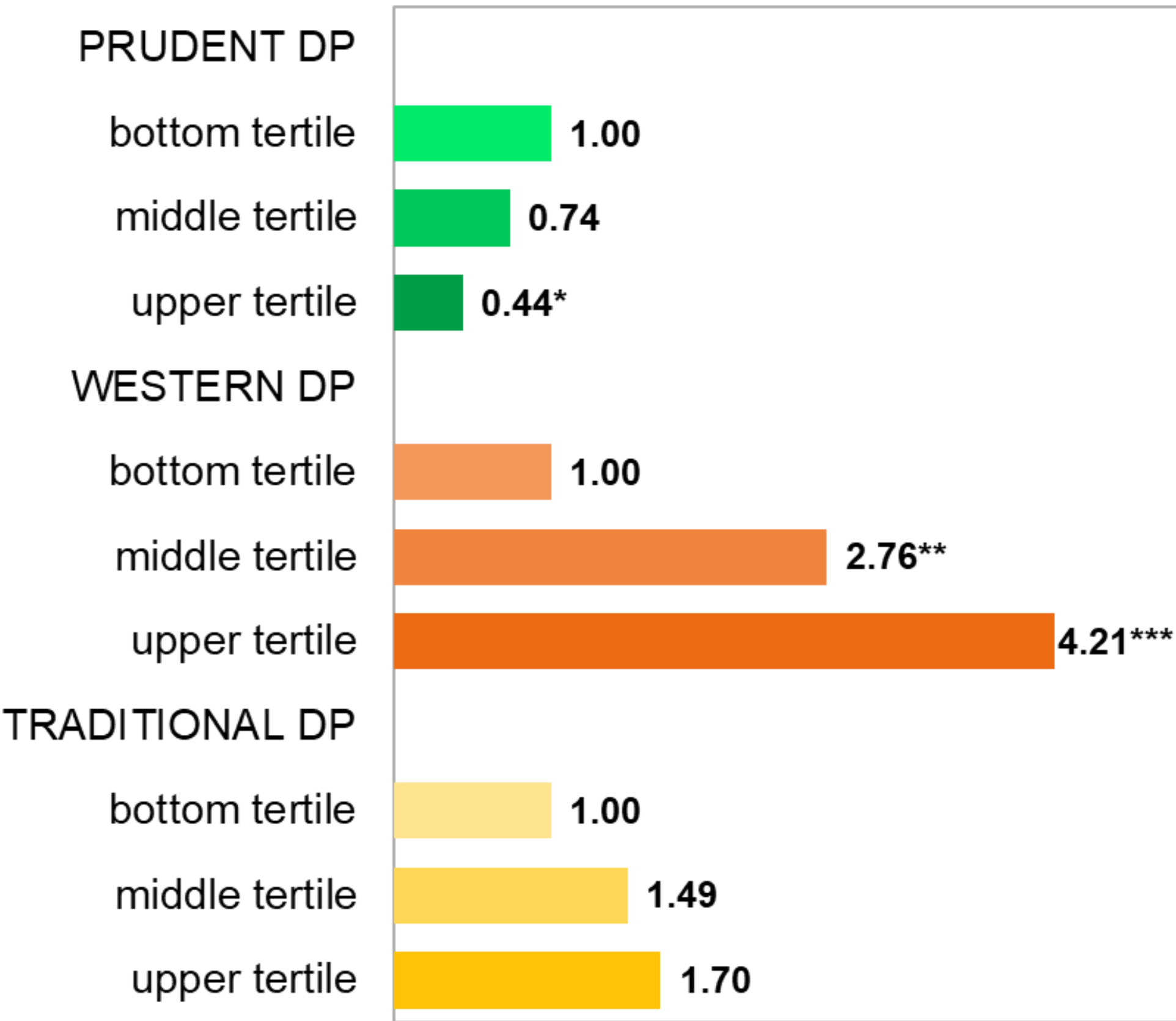
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RESULTS

Anxiety level was mild/moderate in 30.3% and severe in 38.2% of the university students. Severity of anxiety was negatively correlated with Prudent DP ($r = -0.17$, $p = 0.003$), and positively correlated with Western DP ($r = 0.24$, $p < 0.001$). Students with higher anxiety levels were significantly less likely to adhere to the upper tertile of Prudent DP (mild/moderate anxiety: OR = 0.32, 95% CI = 0.15-0.69; severe anxiety: OR = 0.44, 95% CI = 0.21-0.90). Students with severe level of anxiety were significantly more likely to adhere to Western DP (middle tertile: OR = 2.76, 95% CI = 1.33-5.76; upper tertile: OR = 4.21, 95% CI = 1.95-9.12) compared to those with normal level of anxiety. No significant association was observed between the severity of anxiety and adherence to the Traditional DP.

Odds ratios for severe anxiety and adherence to the dietary patterns in university students



* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$