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# BDNF levels are associated with autistic traits in the general population

Running title: BDNF and the continuum of autistic traits

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## Highlights

- Autistic-like traits should be considered as a dimension in the general population
- BDNF correlates positively with autistic-like traits in controls
- BDNF may represent a marker of the continuum of autistic traits

## Abstract

Evidence supports the notion that autistic symptoms and behaviors should be regarded as dimensional traits. The present study aimed to investigate the role of vasopressin (AVP), brain-derived neurotrophic factor (BDNF) and oxytocin (OXT) as potential biochemical correlates of subclinical autistic traits in a cohort of healthy young adults. One hundred and fifty-three subjects (80 males, 73 females) were recruited. Participants completed the Autism Spectrum Quotient (AQ), a widely used measure for the identification of autistic traits in the general population. Additionally, blood samples were obtained from all participants at the same time of the day to control for circadian variation. We conducted a multiple regression analysis using the AQ score as the dependent variable and age, sex, AVP, BDNF and OXT levels as the independent variables. The model explained approximately the 22% of the variance of the AQ score. Among the parameters included in the analysis, only BDNF levels were independent predictors of AQ score.