achieve the goals. By investigating both components, researchers and mental-health professionals can better understand how different aspects of self-efficacy influence the stress-symptom relationship, providing a more nuanced view of coping mechanisms.

Objectives: The aim of this study is to determine how these key components of self-efficacy - action self-efficacy and coping self-efficacy - moderate the relationship between stress and psychosomatic symptoms.

Methods: The analyses were based on the Hungarian contribution to the representative international Health Behaviour in School-aged Children (HBSC) survey, collected in 2021/2022. The study population comprised self-report data from high-school students (N = 3,410; mean age = 16.77 years). We examined the main effects of self-efficacy dimensions and perceived stress, and their interactions in explaining psychosomatic complaints, using linear regression analysis with Hayes' PROCESS macro (Model 1) in SPSS. Age and gender were controlled for as covariates.

Results: *Coping self-efficacy*: The overall model explained 33% of the variance in psychosomatic symptoms ($R^2 = 0.33$, $F(5, 3404) = 330.96$, $p < .001$). The results showed that stress (b = 1.93, $p < .001$), coping self-efficacy (b = 2.18, $p = .02$), and their interaction (b = -0.33, $p = .002$) were significant explanatory variables. This suggests that the relationship between stress and psychosomatic symptoms is weaker among adolescents who reported stronger coping self-efficacy. *Action self-efficacy*: In contrast, the interaction between stress and action self-efficacy was not significant ($p = .16$), implicating that the ability to set goals did not mitigate the effect of stress on symptoms.

Conclusions: The findings imply that coping self-efficacy significantly reduces the relationship between stress and psychosomatic symptoms. Adolescents with stronger coping skills are better equipped to mitigate the adverse effects of stress. However, action self-efficacy did not show a significant moderating effect, highlighting the distinct roles different self-efficacy components play in stress management. These results emphasize the importance of enhancing coping skills, such as cognitive reappraisal, in primary prevention interventions to reduce stress-induced psychosomatic symptoms.

Keywords: adolescents, HBSC, psychosomatic symptoms, self-efficacy, stress

Disclosure of Interest: None Declared

EPP014

Effects of Additional Yoga Intervention in Children and Adolescents with Major Depressive Disorder: A Randomized Controlled Trial

B. N. Patra[1]*, R. Sagar[1] and G. Sharma[2]

[1]Psychiatry and [2]Cardiology, AIIMS, NEW DELHI, New Delhi, India
*Corresponding author.
doi: 10.1192/j.eurpsy.2025.380

Introduction: Depression is one of the most common mental health disorders in children and adolescents. In India, many parents resist psychotropic medication for children due to potential side effects, highlighting the need for non-pharmacological interventions like yoga.

Objectives: The current study investigates the impact of additional yoga therapy on depressive symptoms, global functioning, and parental stress among children and adolescents diagnosed with Major Depressive Disorder (MDD) on children seeking treatment at the Department of Psychiatry of a tertiary care medical institute in India.

Methods: This study included 80 participants aged 6 to 17 years. After taking written informed consent from the parents and assents from the adolescents, they were randomized into two groups: one receiving yoga Therapy alongside treatment as usual (TAU) and the other a waitlist control group receiving only TAU. Assessments were done on both children and their parents, and the instruments included were Centre for Epidemiological Studies Depression Scale for Children (CES-DC), the Children's Global Assessment Scale (CGAS), the Clinical Global Impression scale (CGI), and the Depression Anxiety and Stress Scale (DASS) for parents. Follow-up assessments occurred at 6 and 12 weeks.

Results: In the experimental group, CES-DC scores showed significant improvements, with p value < 0.01 at 6 weeks and < 0.01 at 12 weeks. Global functioning scores also improved, recording p values of < 0.01 at 6 weeks and < 0.01 at 12 weeks. The control group also exhibited results, with CES-DC p values of < 0.01 at 6 weeks and < 0.01 at 12 weeks. Global functioning scores revealed p values of < 0.01 at 6 weeks and < 0.01 at 12 weeks. However, there were no significant differences in the improvement in CES-DC score and functioning in the experimental and control group at the end of 6 weeks and 12 weeks. At the baseline, at end of 6 weeks and at the end of 12 weeks, there were no significant differences in parental depression, anxiety, and stress score.

Conclusions: Yoga therapy was beneficial for the children and adolescents with major depressive disorder. However, there were no significant differences in the improvement in depression and functioning in the experimental and control group.

EPP015

The BDNF/proBDNF ratio as a predictor of antidepressant treatment response in adolescent girls

W. Zwolińska[1,2]*, K. Bilska[3], N. Pytlińska[1], M. Skibińska[3], M. Dmitrzak-Węglarz[3] and A. Słopień[1]

[1]Child and Adolescent Psychiatry Clinic; [2]Doctoral School and [3]Department of Psychiatric Genetics, Poznan University of Medical Sciences, Poznan, Poland
*Corresponding author.
doi: 10.1192/j.eurpsy.2025.381

Introduction: The role of the brain-derived neurotrophic factor (BDNF) in the pathophysiology of depression is well established,

with decreased BDNF levels being associated with the emergence of depressive symptoms. More recent studies have reported that the precursor protein – proBDNF – might also be involved in the pathogenesis of depression since both particles are biologically active and elicit opposing effects: mature BDNF promotes the proliferation of neurons and synaptogenesis, while proBDNF evokes neuronal death. The BDNF/proBDNF ratio has been suggested as a possible biomarker of depression state and treatment response among adults with depression. However, no study has analyzed BDNF/proBDNF serum ratio levels in adolescent depressed patients.

Objectives: We aimed to verify the changes in serum BDNF/proBDNF ratio levels during the course of treatment in adolescents with depression in relation to healthy control. We also aimed to investigate whether this parameter could predict the antidepressant treatment outcome.

Methods: Thirty female inpatients, aged 11-17, diagnosed with a first-lifetime depressive episode were assessed at two time-points: before (t0) and after (t1) the minimum six-week period of the first-line antidepressant treatment and compared with thirty age-matched healthy girls. The assessment at t0 and t1 involved the analysis of BDNF and proBDNF serum levels (ELISA method) and clinical symptoms evaluation using standardized depressive symptoms scales: Children's Depression Inventory (CDI-2) and Hamilton Depression Rating Scale (HDRS). Patients with at least 50% symptom reduction in CDI-2 and HDRS or HDRS<7 were classified as 'responders.' The control group underwent one-time BDNF and proBDNF evaluation. The BDNF/proBDNF ratio has been calculated.

Results: The BDNF/proBDNF serum ratio did not significantly differ between the studied and control groups. We proved no significant differences in BDNF/proBDNF serum ratio before and after the antidepressant treatment, regardless of the treatment outcome. However, responders had a significantly higher pretreatment BDNF/proBDNF ratio when compared with non-responders (Figure 1). The ROC analysis revealed that the BDNF/proBDNF ratio at t0 could predict the remission status at t1 with a sensitivity of 66.67% and a specificity of 81.25% (Figure 2).
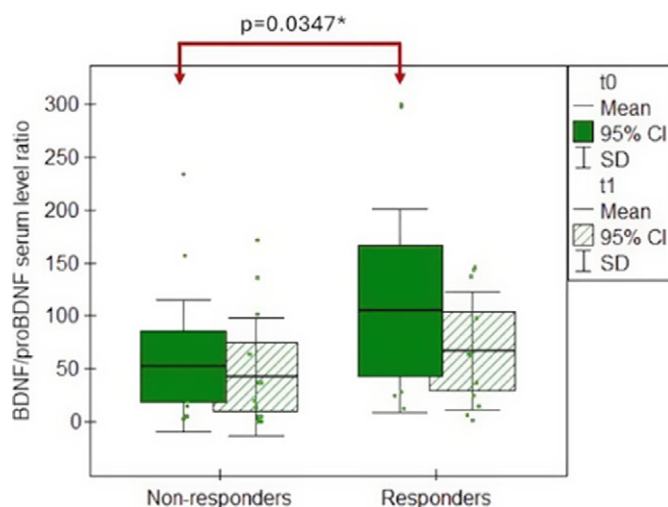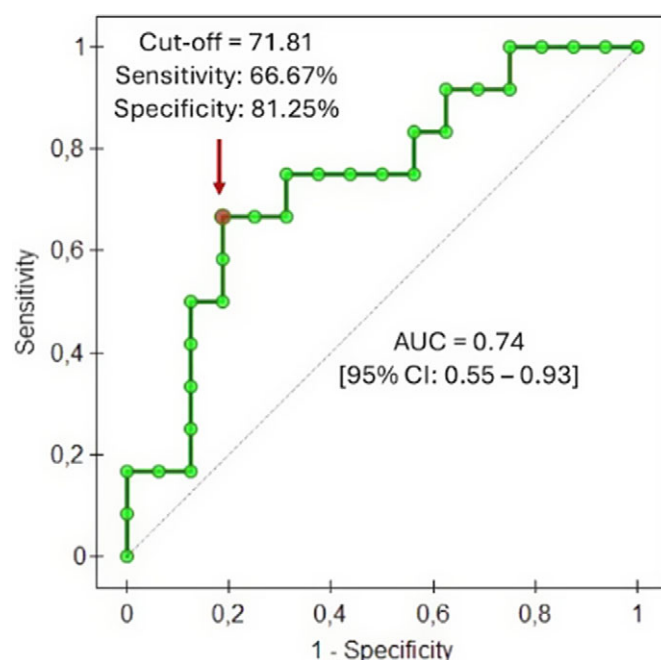
Image 1:

Image 2:

Conclusions: Pretreatment BDNF/proBDNF ratio could be considered a possible biomarker predictive of antidepressant treatment response in adolescent girls.

Disclosure of Interest: None Declared

Comorbidity/Dual Pathologies

EPP018

Genetic overlap of severe psychiatric disorders with lung function and asthma suggests shared biological mechanisms

Z. Lu[1]*, A. Ploner[1], P. Jaholkowski[2], A. Shadrin[2], B. Brew[1], O. Andreassen[2] and S. Bergen[1]

[1]Karolinska Institutet, Stockholm, Sweden and [2]Oslo University, Oslo, Norway
*Corresponding author.
doi: 10.1192/j.eurpsy.2025.382

Introduction: Severe psychiatric disorders, including schizophrenia (SCZ), bipolar disorder (BIP) and anorexia nervosa (AN), are frequently comorbid with lung function decline and asthma. Despite considerable heritability, the genetic relationships between severe psychiatric and respiratory comorbidities are inconclusive.

Objectives: We aimed to thoroughly investigate the shared genetic architecture between three severe psychiatric disorders (SCZ, BIP and AN) and lung function (forced expiratory volume/forced vital capacity ratio) or doctor-diagnosed asthma based on available genome-wide association studies.