

Introduction: Attention deficit and hyperactivity disorder (ADHD) and Anxiety disorder (AD) are psychiatric conditions that should be kept in mind in every child and adolescent presenting with irritability. It is known that circadian rhythm disorders and especially the evening type chronotype are associated with ADHD and AD symptoms.

Objectives: In this study, it was aimed to reveal the relationship between the chronotype and sleep habits and the level of irritability between the two groups in children and adolescents with AD and ADHD.

Methods: In this cross-sectional study, 38 cases diagnosed with AD for the first time, 38 cases diagnosed with ADHD for the first time, and 76 healthy control groups without any psychiatric disorder or physical disease were included in this cross-sectional study. In the study, the sleep habits of the participants were evaluated with the Child Sleep Habits Questionnaire (CIAA); the chronotype preferences of the participants with the Child Chronotype Questionnaire (CCTQ) and the irritability levels of the children with the Affective Reactivity Index parent report form (ARI-P)

Results: It was observed that the AD and ADHD groups had significantly higher ARI-P, CCTQ and CIAA scores compared to the control group. In the correlation analysis, when ADHD and AD were evaluated alone, no significant difference was found between CIAA and ARI-P. The ADHD group had higher CCTQ and ARI-P scores, although not statistically significant, compared to the AD group. Although there was no significant relationship in the AD group, a weak relationship was found between CIAA and ARI-P in the ADHD group.

Conclusions: In our study, it was observed that the evening type chronotype was more prevalent in children with ADHD and AD, and sleep disorders and irritability were more common than the control group. When ADHD and AD groups were compared, no statistically significant difference was found. In the literature, it has been stated that evening chronotype carries a higher risk in terms of psychopathology, irritability seen at a young age can predict anxiety and mood disorders in adulthood, and irritability seen in ADHD can predict mood disorders that occur during follow-up. In this context, investigating the relationship between irritability, sleep disorders and chronotype on the basis of psychopathologies can make important contributions to the literature.

Disclosure of Interest: None Declared

Classification of mental disorders / Intellectual Disability

EPP0018

Taxonomy of psychopathology based on a neurochemical framework

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Introduction: Temperament and mental illness are considered to be variations along the same continuum of imbalance in the neurophysiological regulation of behaviour.

Objectives: This presentation presents the benefits of constructivism approach to psychiatric taxonomies.

Methods: The presentation reviews findings in neurochemistry that link temperament traits in healthy individuals and symptoms of psychiatric disorders to complex relationships between neurotransmitter systems.

Results: Specialization between neurotransmitter systems underlying temperament traits is analyzed here from a functional ecology perspective that considers the structure of adult temperament corresponding to the functional structure of human activities. In contrast to a more popular search for neuroanatomic biomarkers of psychopathology and temperament traits in healthy individuals, this presentation focuses on neurochemistry-based biomarkers. The roles of monoamine neurotransmitters (serotonin, dopamine, noradrenalin), as well as the roles of acetylcholine, neuropeptides and opioid receptor systems in the regulation of specific dynamical properties of behaviour are summarized within the neurochemical Functional Ensemble of Temperament (FET) model (Table 1) (Trofimova & Robbins, Neurosci Biobehav Rev, 2016, 64, 382-402; Trofimova, Neuropsychobiology, 2021, 80(2), 101-133).

Image 2:

Behavioural aspect	Beh. orientation & expansion of d.f.	Speed of integration of actions	Cycle maintenance systems
CBP type	Wide context, probabilistic, implicit aspects: MA, ACh, GG as leads		
T-CBP ≈ N	Probabilistic processing, PRO Glu, NE, ACh	Ease of change in actions: Plasticity, PL DA+ACh, 5-HT, GG	Mental (Intellectual) Endurance, ERI ACh, 5HT
C-CBP < N	Low intelligence and comprehension (possible) Narcissistic PD	Rigidity (rituals in OCD)	Inability to focus as part of the ADHD
C-CBP > N	Part of schizophrenia	Excessive start-ups without finishing them (e.g. in ADHD, mania)	Obsessions, as part of OCD
Context	Complex, novel	Changeable	Requires monitoring
Social-verbal aspects, tuning actions to other people: OXY, Estr as leads			
T-CBP ≈ N	Empathy, EMP OXT+VSP	Social Tempo, TMS DA+Estr	Social Endurance, ERS 5-HT+Estr, H
C-CBP < N	Autistic disorders	Expressive language problems	Social withdrawal
C-CBP > N	Dependent PD	Mania	Histrionic PD
Context	Resonance to others	Fast communication	Long communication
Physical aspects, determined by physical capacities: 5-HT, ORE, H and NPs as leads			
T-CBP ≈ N	Sensation Seeking, SS Tstr, NE/Adr, -Cort	Physical (Motor) Tempo, TMM DA+GABA, A, ACh, NP	Physical (Motor) Endurance, ERM 5-HT+ORE, H, NP
C-CBP < N	Generalised Anxiety	Motor retardation and slowdown, Parkinson D.	Fatigue, sleep problems
C-CBP > N	Antisociality, to bust low HPA arousal	Physical agitation	Athletic ability for endurance
Context	Exceptional tasks	Fast physical routines	Long physical routines
Emotional amplifiers: OR, HPA and GC as leads			
T-CBP ≈ N	Neuroticism, NEU KOR, GC>MOR KOR→NE-HPA, Indifference, detachment	Spontaneity, Impulsivity, IMP Tstr, DOR→(DA, MOR) Inability to be playful or spontaneous	(Disp) Satisfaction, SF MOR→KOR, GC MOR→(5-HT, DA) Dysphoria, pessimism, low confidence
C-CBP < N	Low tolerance to novelty/uncertainty, perceptual alertness	Premature integration of actions, behavioural reactivity, impulsivity	Too relaxed dispositions, over-optimism
C-CBP > N	Uncertainty	Emergency	Safety, support

Conclusions: The FET framework allows having a neurochemistry-based structure of a taxonomy that can classify both, healthy bio-psychological traits and symptoms of psychopathology. The presentation will give examples of how the FET framework can be used in psychiatry and clinical psychology.

Disclosure of Interest: None Declared