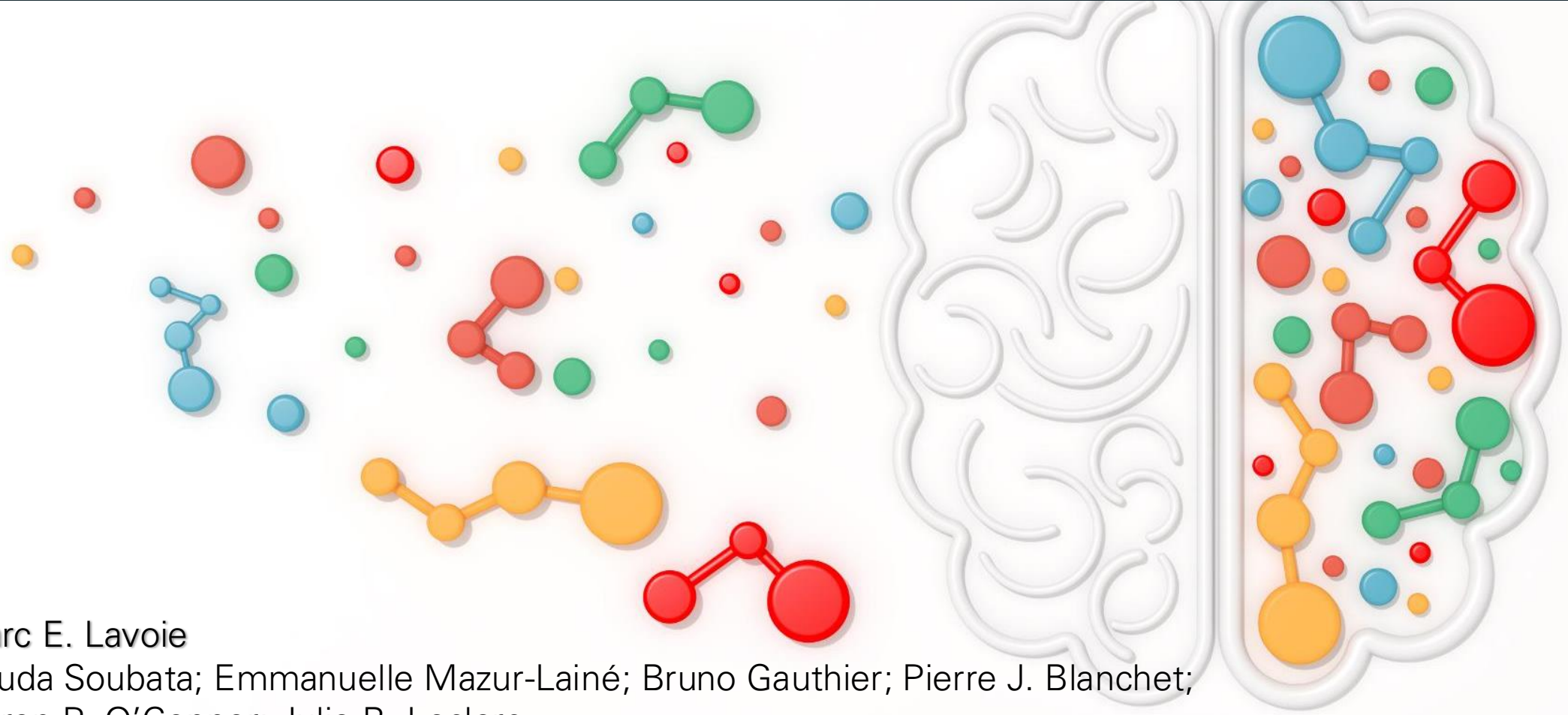

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Comorbidity Matters: Anxiety and Depression Effects in Tourette Syndrome

UNDERSTANDING MENTAL HEALTH CHALLENGES ALONGSIDE NEUROLOGICAL DISORDERS

Scientific ePoster Overview

Context and Clinical Background

Psychiatric Comorbidities in TS

Most adults with Tourette syndrome have at least one psychiatric comorbidity, mainly anxiety and depression.

Impact on Cognitive Functioning

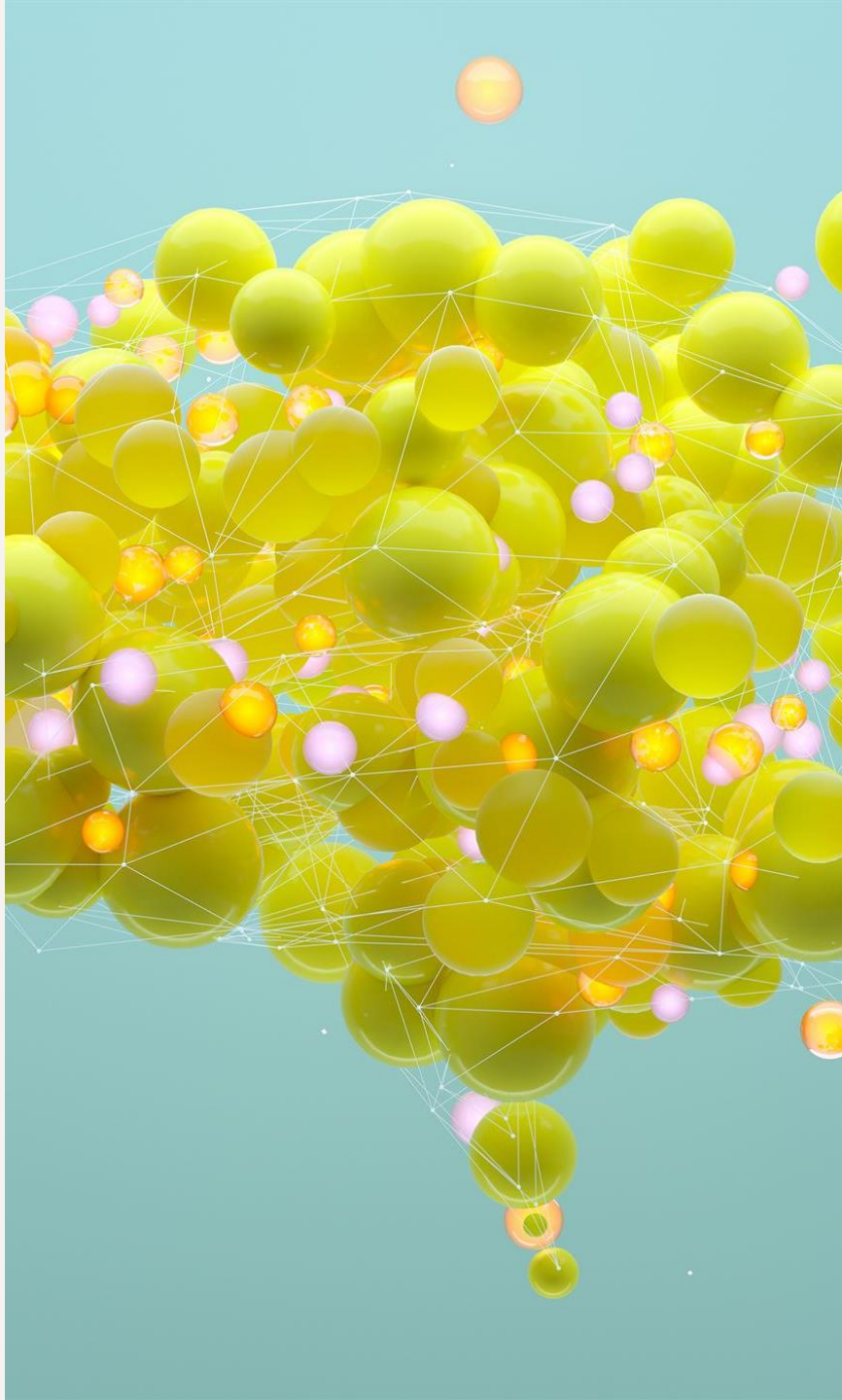
Anxiety and depression affect executive functions, attention, processing speed, and memory in TS patients.

Clinical Interpretation Challenges

Comorbidities can mask or amplify cognitive strengths and weaknesses, complicating clinical assessments.

Refining Neuropsychological Models

Understanding comorbidities is essential for better diagnosis and targeted clinical interventions in TS.



Key Problem and Research Gap

Inconsistent Cognitive Findings

Studies on Tourette syndrome show mixed results in cognitive inhibition and visuospatial functioning.

Methodological Limitations

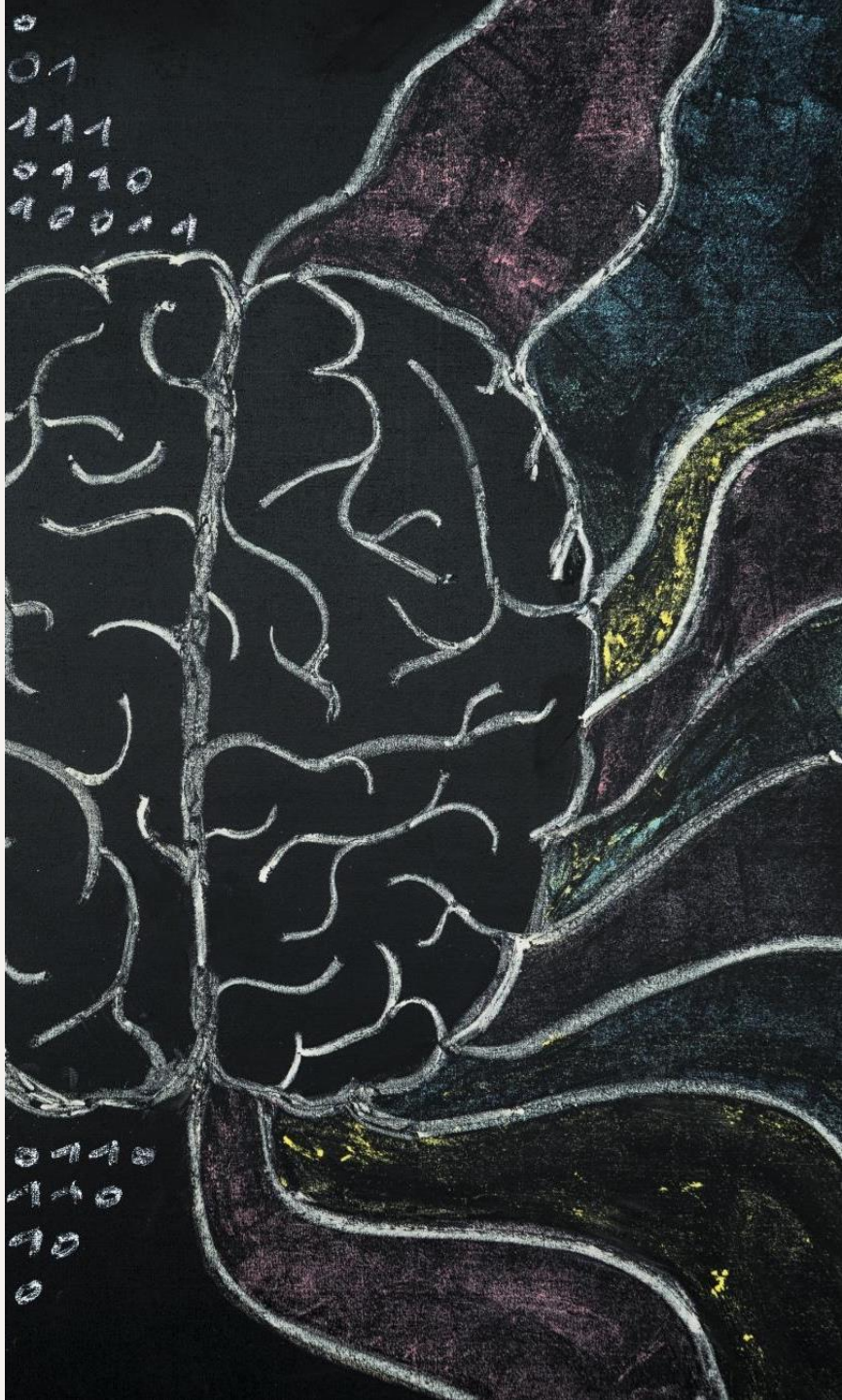
Failure to separate TS effects from comorbid anxiety and depression leads to unclear interpretations.

Critical Research Gap

Few studies compare TS with and without comorbidities to neurotypical controls for clearer insights.

Objective of Current Study

This study isolates comorbidity effects to better understand cognitive functions in Tourette syndrome.



Methods and Neuropsychological Assessment

Comparative Study Design

The study compared three groups: Tourette with comorbid anxiety/depression, Tourette without comorbidity, and neurotypical controls.

Participant Matching Criteria

Participants were matched by age, sex, handedness, and nonverbal intelligence to reduce confounding variables in cognitive comparisons.

Neuropsychological Tests Used

Key assessments included Stroop Color–Word Test for inhibition, Purdue Pegboard for fine motor skills, and Rey–Osterrieth Figure for visuospatial memory.

Main Results and Discriminant Patterns

Interference Inhibition Findings

Stroop task showed no significant interference inhibition deficits in Tourette groups, regardless of comorbidity status.

Superior Motor Performance

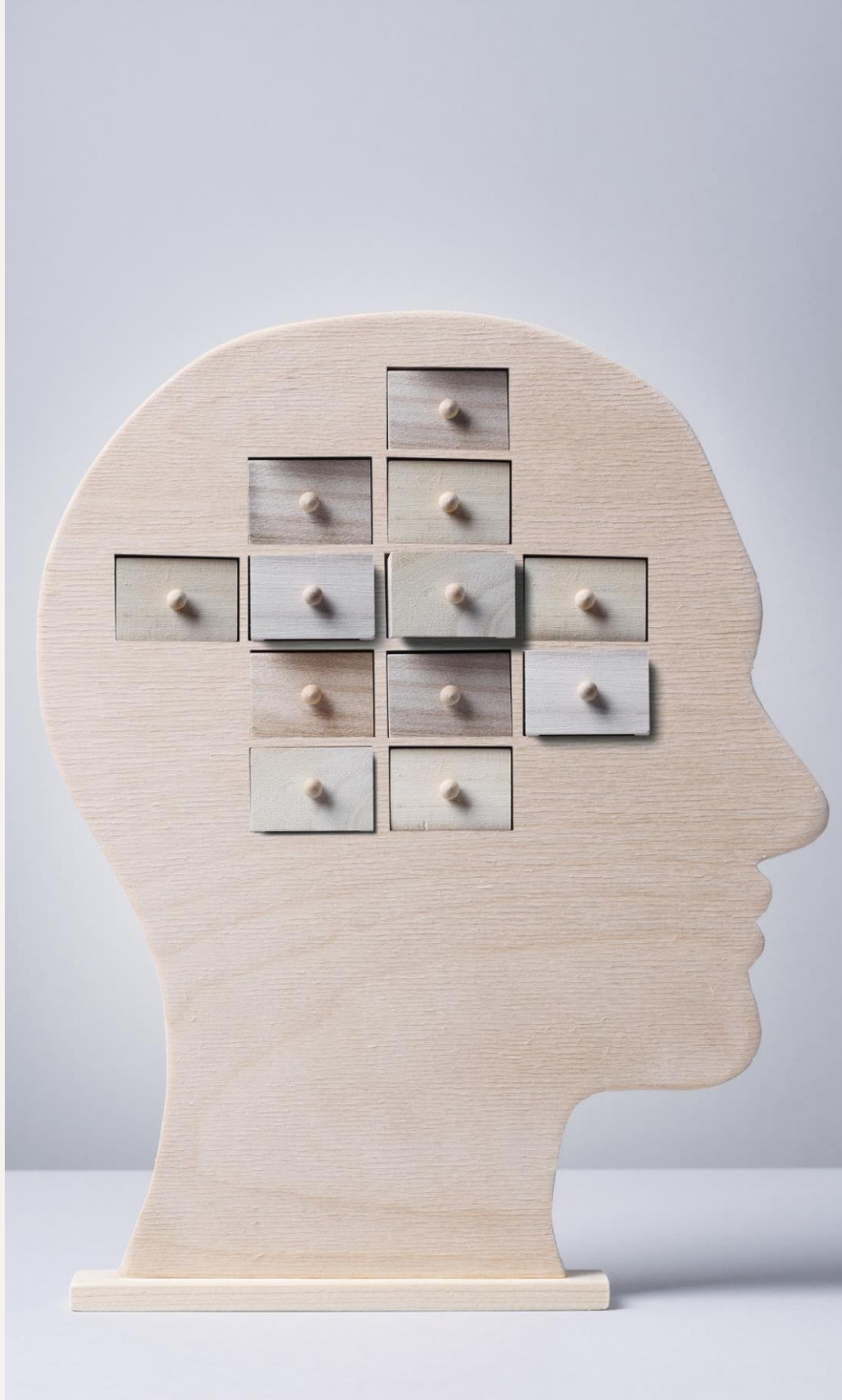
Tourette groups demonstrated superior fine motor dexterity on Purdue Pegboard, independent of anxiety or depression.

Memory Recall Deficits

TS with comorbid anxiety/depression showed reduced immediate and delayed recall on Rey–Osterrieth Complex Figure test.

Discriminant Analysis Insights

Analysis distinguished TS from controls and comorbid TS group based on motor, processing speed, and memory measures.



Conclusion and Clinical Implications

Comorbidity Effects on Cognition

Comorbidity impacts cognitive domains selectively, with inhibition preserved and motor skills intact in Tourette syndrome.

Role of Anxiety and Depression

Anxiety and depression exacerbate visuospatial and nonverbal memory deficits, creating cognitive vulnerabilities in TS patients.

Clinical and Research Implications

Findings emphasize importance of psychiatric assessments and tailored treatments for affective comorbidities in Tourette syndrome.

Individualized Understanding

Recognizing selective comorbidity impacts improves diagnosis, intervention, and neuropsychological models of TS.