

## Neurobiological Correlates of Personality-Driven Psychosomatic Reactivity: A Psychoneuroimmunological Perspective

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### R e v i e w e r s

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## 1. Round 1

### 1.1. Reviewer 1

Reviewer:

In the paragraph beginning “Psychosomatic reactivity has long occupied a central position...”, the conceptual distinction between psychosomatic reactivity and somatic symptom burden is not clearly defined. Consider adding a sentence explicitly differentiating reactivity (process) from symptom reporting (outcome) to avoid conceptual ambiguity later in the paper.

The paragraph discussing neuroticism, conscientiousness, and agreeableness would be strengthened by briefly justifying why extraversion and openness were retained in the model, despite weaker theoretical links to psychosomatic outcomes reported in prior literature.

The description of the Big Five Inventory reports prior validation but does not provide internal consistency coefficients (Cronbach’s  $\alpha$ ) for the current sample. Reporting these values is essential for psychometric transparency.

The SSS-8 is described as measuring symptoms “over the past seven days.” Please discuss whether this short recall window is conceptually aligned with inflammatory markers that may reflect longer-term processes.

Authors revised the manuscript and uploaded the document.

### 1.2. Reviewer 2

Reviewer:

The sentence “Dysregulation of cortisol rhythms... has been implicated in a wide range of psychosomatic and affective disorders” would benefit from specifying whether the focus is on hyper-reactivity, hypo-reactivity, or diurnal flattening, as these patterns have distinct clinical interpretations.

While IL-6 and CRP are well justified, the paragraph does not clarify whether they are treated as acute stress markers or indicators of chronic low-grade inflammation. This distinction is important for interpreting the cross-sectional findings.

The paragraph on gut microbiota is conceptually rich but empirically disconnected from the current study, as no microbiome data were collected. Consider explicitly framing this section as theoretical context to avoid reader expectations of empirical testing.

The claim that personality traits are “often treated as covariates rather than central organizing variables” is compelling; however, providing one concrete example from prior studies would strengthen this argument.

In the sentence “Participants were recruited from urban primary healthcare centers and university-affiliated medical clinics”, please clarify whether recruitment was consecutive, convenience-based, or stratified, as this affects external validity.

Although age range and sex distribution are reported, the manuscript does not describe socioeconomic status, education level, or employment, which are relevant confounders in stress and inflammation research. Consider reporting these variables or acknowledging their omission.

Authors revised the manuscript and uploaded the document.

## 2. Revised

Editor’s decision: Accepted.

Editor in Chief’s decision: Accepted.