

AI-Based Profiling of Personality Disorder Traits Associated with Chronic Somatic Symptoms

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1. Round 1

1.1. Reviewer 1

Reviewer:

In the opening paragraph beginning “Chronic somatic symptoms constitute a major challenge...”, the manuscript would be strengthened by providing an explicit operational or diagnostic definition (e.g., DSM-5 SSD framework vs. functional somatic syndromes) earlier, as the current phrasing risks conceptual ambiguity between medically unexplained symptoms and chronic symptoms with partial organic explanations.

The paragraph discussing “personality-related vulnerabilities” should more clearly distinguish between personality traits, personality functioning, and personality disorder traits. As later analyses rely on AMPD-aligned traits, an explicit conceptual bridge here would improve theoretical coherence.

While fibromyalgia studies are cited extensively (“Studies focusing on fibromyalgia, multisomatoform disorder...”), the introduction would benefit from a clearer justification for generalizing these findings to broader chronic somatic symptom populations, particularly non-pain-dominant presentations (e.g., fatigue, cardiopulmonary symptoms).

In the Data Analysis section, both classification metrics (accuracy, AUC) and regression metrics (RMSE) are reported. Please clarify whether symptom severity was dichotomized for some models and continuous for others, and justify this dual approach.

The statement “Covariates such as age, sex, and psychological distress were incorporated...” should specify whether covariates were entered as baseline controls, competing predictors, or adjusted post-hoc, and whether interaction effects were tested.

Authors revised the manuscript and uploaded the document.

1.2. Reviewer 2

Reviewer:

In “Study Design and Participants”, the recruitment strategy combining outpatient settings and online platforms raises potential selection bias. Please add a paragraph explicitly discussing how recruitment source heterogeneity was handled analytically or statistically.

The criterion “reporting the presence or absence of chronic somatic symptoms persisting for at least six months” should specify whether symptom persistence was clinician-verified or self-reported, as this distinction has implications for validity.

The sentence “Personality disorder traits were assessed using a dimensional measure aligned with contemporary trait-based models...” requires the explicit name of the instrument, number of items, response scale, and example item, consistent with reporting standards.

While you note “acceptable psychometric properties”, please report internal consistency coefficients (e.g., Cronbach’s α or ω) for the current sample rather than relying solely on prior validation studies.

Authors revised the manuscript and uploaded the document.

2. Revised

Editor’s decision: Accepted.

Editor in Chief’s decision: Accepted.