




Latent Class Analysis of Cognitive Load Profiles in Women Experiencing Impostor Phenomenon: Implications for Academic Persistence

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1. Round 1

1.1. Reviewer 1

Reviewer:

The literature review on impostor phenomenon and gender is rich and conceptually grounded, but at times it reads as descriptive rather than integrative; I recommend organizing this section around a few explicit mechanisms (e.g., shame, self-compassion, self-handicapping, minority stress) and then explicitly linking each mechanism to hypothesized effects on different types of cognitive load, thereby making the logical bridge to cognitive load theory more transparent and testable.

The conceptualization of academic persistence as involving commitment, cognitive resilience, and navigation of institutional barriers is appropriate; however, the authors should clarify which specific instruments and indicators they use to operationalize persistence, report their psychometric properties in this sample (reliability, validity), and discuss the extent to which self-report measures adequately capture the complex, longitudinal process implied by “persistence.”

While the manuscript convincingly portrays impostor phenomenon as a multi-dimensional psychological burden, the theoretical framing might overemphasize within-person deficits (e.g., low self-compassion, self-doubt) at the expense of structural and environmental contributors (e.g., biased evaluation systems, lack of role models, hostile climates), which are likely to be powerful sources of extraneous load; the discussion should more clearly acknowledge this limitation and consider how institutional interventions, not only individual-level training, could modify cognitive load profiles.

To enhance the contribution for both educational practitioners and clinical/academic counselors, the authors should more concretely articulate the practical implications of identifying distinct cognitive load profiles among women with impostor experiences—e.g., what specific instructional design changes, mentoring practices, or psychological interventions would be tailored to each profile, and how realistic is it to assess these profiles in applied settings?

Authors revised the manuscript and uploaded the document.

1.2. Reviewer 2

Reviewer:

The connection between impostor feelings and academic persistence is well motivated conceptually, yet the authors could strengthen the argument by distinguishing more clearly between “persistence intention,” “behavioral persistence,” and “objective retention” and by clarifying which of these facets the current study actually measures; this distinction will help readers evaluate the practical significance and generalizability of the findings.

The introduction of cognitive load theory is accurate and pedagogically clear, but the manuscript would benefit from more specific a priori hypotheses about how impostor-related cognitions and emotions map onto intrinsic, extraneous, and germane load (e.g., does rumination and self-doubt function primarily as extraneous load? does chronic self-monitoring reduce germane load?) and how these patterns are expected to differ across the latent classes that the authors ultimately extract.

The rationale for using a person-centered latent class analysis (LCA) framework is promising, yet it is not fully developed in the sections available: the authors should more explicitly justify why a latent class model is preferable to a variable-centered approach (e.g., latent profiles capture qualitatively distinct cognitive load configurations that may be obscured by linear models), specify how many classes they expected based on theory or prior research, and clarify in the methods how class enumeration criteria (fit indices, interpretability, parsimony) were used.

Given that the study focuses exclusively on women, the manuscript should engage more explicitly with intersectionality and contextual factors: for instance, it would be useful to discuss whether the sample includes diversity in academic field, socioeconomic status, or minority status, and how systemic gender bias and structural barriers might contribute to elevated extraneous load and heightened impostor feelings beyond individual-level traits, thus situating the findings within a broader socio-cultural context.

Authors revised the manuscript and uploaded the document.

2. Revised

Editor’s decision: Accepted.

Editor in Chief’s decision: Accepted.