

Modeling Organizational Ambidexterity through Ensemble Learning: Behavioral and Structural Predictors of Exploratory and Exploitative Innovation

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1. Round 1

1.1. Reviewer 1

Reviewer:

The argument that linear modeling techniques are insufficient would benefit from one brief methodological example (e.g., failure of regression to capture high-order interactions) to make the critique more concrete.

The description of “multi-stage stratified sampling” should include the exact number of strata and the industry proportions to improve methodological reproducibility.

Please justify why a minimum of two years of innovation-related experience was selected as the inclusion threshold rather than a higher or variable criterion.

When stating that instruments were adapted from established frameworks, please identify the original scale sources for exploratory and exploitative innovation to enhance transparency.

The claim that ensemble learning advances methodology would benefit from stating at least one specific implication for organizational researchers unfamiliar with machine learning.

You indicate that psychological safety and risk tolerance influence both innovation dimensions. Please clarify whether their effects differ in magnitude between exploratory and exploitative innovation.

The discussion of telepressure and digital work intensification is insightful, but since telepressure is not directly measured in the study, clarify its role as a contextual extension rather than an empirical result.

When stating that the findings extend ambidexterity theory, explicitly indicate which core assumption of existing theory is being refined or expanded.

Authors revised the manuscript and uploaded the new document.

1.2. *Reviewer 2*

Reviewer:

The pilot study is valuable, but the manuscript should report the reliability coefficients obtained during the pilot phase to demonstrate preliminary instrument quality.

Confirmatory factor analysis is mentioned, yet key fit indices (e.g., CFI, TLI, RMSEA, SRMR) are not reported. These should be explicitly provided.

The statement that “all behavioral predictors show strong positive correlations” requires clarification of the threshold used to define “strong” correlations.

The claim that the ensemble model “substantially outperformed” the individual algorithms would be more convincing if supported by formal statistical comparisons between models.

Please clarify whether feature importance scores were normalized and explain how importance values were aggregated across different algorithms in the ensemble.

You note “asymmetric predictor effects.” Provide at least one concrete example of a nonlinear interaction observed in the SHAP analysis to substantiate this claim.

The narrative describing Figure 1 is theoretically rich, but the figure itself should display explicit directional arrows and feedback loops to visually represent the dynamic relationships discussed.

Authors revised the manuscript and uploaded the new document.

2. Revised

Editor's decision after revisions: Accepted.

Editor in Chief's decision: Accepted.