

Unsupervised Learning of Organizational Learning Patterns: The Roles of Knowledge Sharing and Cognitive Flexibility

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1. Round 1

1.1. Reviewer 1

Reviewer:

As currently presented, the manuscript contains numerous missing numerical results (placeholders) for essential statistics, including standardization parameters, correlations, PCA diagnostics (KMO, Bartlett's test), variance explained, silhouette scores, and MANOVA/ANOVA results (pp. 5–6). These omissions prevent verification, interpretation, and reproducibility; the authors must replace all placeholders with exact values and ensure internal consistency between text and tables before the work can be meaningfully evaluated.

The follow-up MANOVA and Tukey tests comparing knowledge sharing and cognitive flexibility across clusters are appropriate in principle (pp. 5–6), but the manuscript needs complete reporting (Wilks' Λ , F , df , p , partial η^2 ; and for ANOVAs, homogeneity checks such as Levene's). Because clusters are derived from data, the authors should also discuss potential "double-dipping" concerns and frame inferential claims cautiously, emphasizing descriptive differentiation unless cross-validated.

Authors revised the manuscript and uploaded the new document.

1.2. Reviewer 2

Reviewer:

The Methods describe convenience sampling with snowballing among Egyptian corporate professionals and mention removal of invalid/duplicate/incomplete responses (p. 4), but the visible text does not report the final sample size N , response rate, demographic composition, or organizational distribution. These details are not optional: clustering quality and MANOVA power depend heavily on N and cluster sizes, so the manuscript should report N , cluster counts, inclusion/exclusion rules, and a transparent sampling flow.

The authors state they used standardized multidimensional scales for organizational learning, knowledge sharing (donation/collection), and cognitive flexibility (p. 4), and that items were translated and pilot-tested in Arabic (p. 4). For scholarly rigor, please provide the exact instrument names/citations, item counts, example items, scoring procedures, reliability coefficients (e.g., Cronbach's α or ω) in the main sample, and evidence of validity (e.g., CFA or at least clear justification for PCA choices) to support the constructs being clustered and compared.

Using PCA to reduce dimensionality before k-means is defensible (p. 5), yet the manuscript must justify key decisions: how many components were retained (beyond naming four), the retention rule (eigenvalues, scree, parallel analysis), rotation (if any), and how component scores were computed. Reporting the cumulative variance explained and component loadings is especially important because the cluster solution's meaning depends on what these components actually capture.

The three-cluster solution ("Passive," "Adaptive," "Proactive") is intuitively interpretable (p. 5), but the evidential basis currently relies on elbow and silhouette criteria with missing values (p. 5). Please report cluster sizes, mean silhouette (overall and per-cluster), and consider at least one robustness check (e.g., multiple random starts with stability assessment, split-sample replication, or comparison with an alternative clustering method such as hierarchical clustering) to reduce concerns that the profiles are artifacts of initialization or sampling noise.

Authors revised the manuscript and uploaded the new document.

2. Revised

Editor's decision after revisions: Accepted.

Editor in Chief's decision: Accepted.