

Cluster Analysis of Iranian Provinces Based on Islamic Work Ethics, Organizational Commitment and Job Satisfaction among Aid Workers of the Red Crescent Society

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Abstract

INTRODUCTION: Islamic work ethics constitute a fundamental component of organizational culture within relief organizations. Higher levels of work ethics appear to promote both organizational commitment and job satisfaction among aid workers. Examining inter-provincial variations in these indicators may provide strategic insights for human resource policymaking and performance enhancement within the Iranian Red Crescent Society (IRCS).

METHODS: A cross-sectional study was conducted among aid workers of the IRCS across all provinces of Iran in 2024. Islamic work ethics, organizational commitment, and job satisfaction were assessed using validated and widely applied standardized questionnaires. K-means clustering was employed to identify distinct provincial groupings based on aggregated mean scores for each indicator at the provincial level. The optimal number was determined through iterative model testing and evaluation of clustering stability.

FINDINGS: The findings indicated that among the 3,399 respondents, 2,221 (65.3%) were male and 1,178 (34.7%) were female, with a mean age of 36.9 years. The mean scores for Islamic work ethics, organizational commitment, and job satisfaction were 4.23 ± 0.42 , 3.54 ± 0.40 , and 3.82 ± 0.40 , respectively. Based on the inflection point of the elbow plot and the K-means clustering results, a three-cluster solution was identified as the most appropriate classification. Cluster 1 comprised 12 provinces with moderate levels across all three indicators. Cluster 2 included 9 provinces and demonstrated the highest overall scores, whereas Cluster 3 consisted of 8 provinces and exhibited the lowest levels across all indicators.

CONCLUSION: According to the results, the three clusters were labeled as Moderate (Cluster 1), High (Cluster 2), and Developing (Cluster 3) to reflect their relative performance across the three indicators. Provinces in the high cluster appear to benefit from more effective management practices and supportive work environments. In contrast, provinces in the developing cluster demonstrated lower scores, underscoring the need for targeted interventions to strengthen employee engagement and improve organizational outcomes.

Keywords: Clustering; Relief worker; Islamic work ethics; Organizational commitment; Job satisfaction.

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Introduction

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