

Confirmatory and exploratory factor analyses of adaptive performance scale: a study among hospital nurses

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Abstract

Introduction: Adaptive performance is defined as an employee's ability to deal with changes and new and unusual situations in the workplace. The present study mainly focused on factor analysis of the Adaptive Performance Scale (APS) and determining its validity and reliability. Adaptive performance is a multi-dimensional structure with five latent factors.

Materials and Methods: This method validation study was conducted in Ahvaz, Iran. 210 randomly selected public hospital nurses completed the Persian version of the APS. Exploratory factor analysis (varimax rotation) was used to explore the factor structure of the scale. Confirmatory factor analysis and structural equation modeling were applied to fit the model.

Results: The overall reliability of the APS was confirmed (Cronbach's alpha = 0.89). Factor analysis was used to evaluate the factor structure of the scale. Kaiser-Meyer-Olkin index (0.88) and Bartlett's sphericity test result (1639.093) were both significant. Finally, varimax rotation showed all items to have significant factor loadings.

Conclusion: Our findings confirmed the acceptable psychometric properties (reliability and validity) of the APS for administration among nurses. Therefore, the adaptive performance construct contains five distinct dimensions, namely dealing with emergency and unexpected situations, work stress management, creative problem solving, learning, and interpersonal adaptability. These results are consistent with previous studies.

Keywords: Adaptive performance, Questionnaire, Exploratory factor analysis, Confirmatory factor analysis, Nurses

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