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Work Ability Index (WAI) and Its Association with Psychosocial Factors

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Background: This study was carried out to evaluate the psychometric properties of an Iranian translation of the Work Ability Index (WAI) questionnaire.

Methods: In this methodological study, workers from two major companies in Iran, petrochemical and car manufacturing company (645 workers) completed the questionnaire and 10% of the workers filled out the WAI questionnaire for the second time to ensure test–retest reliability. Forward–backward method was applied to translate the questionnaire from English into Persian. The psychometric properties of the Iranian translation of the WAI were assessed using the following tests: Internal consistency (to test reliability), test–retest analysis exploratory factor analysis (construct validity), and discriminate validity by comparing the mean WAI score in two groups of the employees that had different levels of sick leave.

Results: Cronbach's alpha coefficient was estimated to be higher than 0.6 and it was concluded that the internal consistency was high enough. The intraclass correlation coefficient was recognized to be 0.92. Factor analysis indicated three factors in the structure of the work ability including self-perceived work ability, mental resources, and presence of disease and health related limitation. Statistical tests showed that this questionnaire was capable of discriminating two groups of employees who had different levels of sick leave.

Conclusion: The finding of the study showed that the Iranian version of the WAI is a reliable and valid measure of work ability and can be used both in research and practical activities.