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IJIE

http://penerbit.uthm.edu.my/ojs/index.php/ijie
ISSN : 2229-838X e-ISSN : 2600-7916

The International Journal of Integrated Engineering

Validating The Impact of Psychological, Physical and Social Factors on Workplace Well-Being at Construction Sites

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DOI: https://doi.org/10.30880/ijie.2023.15.02.024
Received 11 January 2023; Accepted 01 May 2023; Available online 13 September 2023

Abstract: A good workplace well-being environment can increase employee resilience, work engagement, project performance, and productivity, as well as reduce sick days. Research suggests that physical, psychological, and social factors are the underlying factors for a good workplace well-being However, the underlying factors for workplace well-being at construction sites may differ. This study aims to validate the relationships between underlying factors (i.e., physical, psychological, and social) and workplace well-being at construction sites. A questionnaire survey was developed from a list of factors influencing workplace well-being and distributed to construction professionals. The collected data was analyzed using confirmatory factor analysis (CFA) to validate the relationships between the underlying factors and workplace well-being at construction sites. The analysis revealed that physical, psychological, and social factors are also influencing workplace well-being at construction sites. Researchers and industry practitioners can use these findings to confidently establish strategies to increase workplace well-being of construction workers.

Keywords: Well-being, construction industry, building construction, confirmatory factor analysis, PLS-SEM

1. Introduction

Workplace well-being can be defined as workplace attributes that encourage healthy behavior, enhance health outcomes, and strengthen workplace culture. Poor workplace well-being can lead to decreased productivity and project failures. However, construction remains a high-risk industry for health and workplace well-being issues. For example, Europe's construction industry reported 782 fatal accidents in 2014, including people falling and tools, equipment, and machines breaking, collapsing, or losing control [1]. Other factors contributing to high-stress levels among workers in the construction industry include hard workloads, rushed deadlines, long working hours, financial concerns, and isolation. In the United States, 16% of construction workers interviewed are in serious distress [2]. Furthermore, the workplace well-being of construction workers is worse than that of the general population in Australia [3]. So, in addition to health risks, the circumstances in the construction industry put people at risk for poorer workplace well-being. In other words, prior works demonstrated that it is challenging for construction workers to achieve good

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