

Development of workplace well-being indexes at construction sites

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Abstract

Purpose – This study aims to develop workplace well-being indexes for construction sites of different project types (infrastructure, high-rise and low-rise). Accordingly, the study objectives are to identify the critical factors that affect workplace well-being at construction sites, compare the critical factors between different project types, categorize the critical factors into subgroups and compute indexes for the critical factors and subgroups.

Design/methodology/approach – Data from a systematic literature review and semi-structured interviews with construction industry professionals were used to extract 19 potential factors that affect workplace well-being. Then, a structured questionnaire survey was distributed, and 169 valid responses were collected. Finally, the data were analyzed using normalized mean analysis, agreement analysis, factor analysis and fuzzy synthetic evaluation.

Findings – The study findings revealed that there are 11, 11, 8 and 12 critical factors across overall infrastructure, high-rise and low-rise construction projects. Out of those, six critical factors are overlapping across project types, including “general safety and health monitoring,” “salary package,” “timeline of salary payment,” “working hours,” “communication between workers” and “planning of the project.” Accordingly, the critical factors can be categorized into two subgroups within each project type. Finally, the development of indexes shows that infrastructure construction projects have the greatest index compared to other project types.

Originality/value – This study contributes to filling the current knowledge gap by developing workplace well-being indexes at construction sites across different project types. The indexes would assist decision-



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