

## **AN INFERENCE-BASED BOOTSTRAP AND MIXED METHODS APPROACH TO EXAMINING THE IMPACTS OF BEHAVIOR-BASED SAFETY ON JOB SATISFACTION AND STRESS: FROM THE CONSTRUCTION WORKERS' PERCEPTION**

(*Pentaabiran Berasaskan Bootstrap dan Kaedah Gabungan untuk Mengkaji Kesan Keselamatan Berasaskan Tingkah Laku Terhadap Kepuasan Kerja dan Tekanan: Daripada Persepsi Pekerja Binaan*)

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### *ABSTRACT*

Behaviour-Based Safety programme requires diligent support, adequate planning, and sufficient resources, in addition to exceptional motivations. This study aimed to identify possible elements that reflect an individual's perception of BBS and its influence on job satisfaction and stress. In order to identify critical factors influencing employees' perceptions of BBS in construction industry, a series of individual semi-structured interviews were conducted with experts ( $n = 12$ ). Partial Least Squares (PLS-SEM) was used to analyse the effect of BBS perception on employee work stress and job satisfaction at five construction sites utilising BBS in Malaysia. The study identified seven factors that influence employees' perception of BBS. It also indicated that employees' work stress and job satisfaction are directly affected by how they perceive BBS. Therefore, an improved BBS can help employees differentiate between safe and unsafe behaviours, hereby enhancing prevention of accidents, job satisfaction, welfare, and the overall safety culture of the organisation.

**Keywords:** Behaviour-Based Safety; workers' perception; critical factors; job satisfaction; job stress; construction industries

### *ABSTRAK*

Program keselamatan berasaskan tingkahlaku (BBS) memerlukan sokongan pihak atasan, perancangan yang mencukupi, dan sumber yang mencukupi, selain motivasi yang tinggi. Kajian ini bertujuan untuk mengenal pasti faktor-faktor yang mungkin mencerminkan persepsi individu terhadap BBS dan pengaruhnya terhadap kepuasan kerja dan tekanan. Untuk mengenal pasti faktor kritikal yang mempengaruhi persepsi pekerja terhadap BBS dalam industri pembinaan, satu siri wawancara separa berstruktur individu telah dijalankan dengan pakar ( $n = 12$ ). Kaedah kuasa dua terkecil separa (PLS-SEM) digunakan untuk menganalisis kesan persepsi BBS terhadap tekanan kerja pekerja dan kepuasan kerja di lima tapak pembinaan yang menggunakan BBS di Malaysia. Kajian ini mengenal pasti tujuh faktor yang mempengaruhi persepsi pekerja terhadap BBS. Ia juga menunjukkan bahawa tekanan kerja dan kepuasan kerja pekerja secara langsung dipengaruhi oleh persepsi mereka terhadap BBS. Oleh itu, pelaksanaan BBS yang lebih baik dapat membantu pekerja membezakan antara tingkah laku yang selamat dan tidak selamat, dengan ini meningkatkan kadar keselamatan, kepuasan kerja, kebijakan, dan budaya keselamatan keseluruhan organisasi.

**Kata kunci:** Keselamatan berasaskan tingkahlaku; persepsi pekerja; faktor kritikal; kepuasan kerja; tekanan kerja; Industri Pembinaan

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