ERGONOMICS ANALYSIS OF FALLING AMONG WORKERS AT WORKPLACE

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Specially dedicated,

To my beloved husband,

Ng Zheng Yi

To my brothers and sister, lecturers, and fellow friends

For their support and encouragement

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ABSTRACT

Slips and trips are the most common cause of major injuries at work. Fall accidents continue to be a significant cause of fatal injuries and economic losses. Identifying the risk factors causing slip-induced falls is key to developing better preventive measures to reduce fall accidents. Although many studies suggest human physical condition may be one of the risk factors for slip-induced falls, there has been no documented study examining the relationship between human intrinsic factors (physical and psychophysics), extrinsic factors (external environments), and fall accidents. As such, the overall objective of the current study was to identify factor contribute to slips and fall incidents among workers at workplace in Malaysia. This project will analysis slip distance based on the interaction of the external environments factors, human physical factors, and human psychophysics factors that causes the incident of slips and falls. Based on the result suggestion and guideline can be produce to overcome the slips and falls incident.

ABSTRAK

Kemalangan kejatuhan adalah punca pertama kecederaan di tempat kerja. Kemalangan kejatuhan terus menjadi punca besar untuk pekerja kecederaan , maut dan kerugian dalam ekonomi. Untuk mengamalkan langkah-langkah pencegahan yang lebih baik untuk mengurangkan kemalangan jatuh faktor-faktor risiko yang menyebabkan kemalagan kejatuhan berlaku kena dipastikan. Walaupun banyak kajian telah menunjukkan keadaan fizikal manusia adalah salah satu faktor risiko yang menyebabkan kemalangan kejatuhan, tetapi masih tiada kajian telah mengaji hubungan antara faktor manusia intrinsik (fizikal dan psychophysics), faktor-faktor ekstrinsik (persekitaran luar), dan kemalangan kejatuhan. Oleh sebab itu, projek ini diilhamkan untuk mengenal pasti punca-punca utama berlakunnya masalah tergelincir dan terjatuh dikalangan para pekerja khasnya ditempatkerja. Seterusnya projek ini akan mengira jarak tergelincir dari hasil interaksi antara faktor-faktor persekitaran luaran, faktor-faktor fizikal manusia, dan manusia psychophysics faktor. Hasil daripada projek ini, ia boleh membantu untuk menghasilkan beberapa cadangan dan penambaikan kepada garis panduan yang sedia ada untuk meminimakan kejadian tergelincir dan terjatuh. Projek kehendak jarak slip analisis yang menyebabkan kejadian tergelincir dan terjatuh. Berdasarkan cadangan keputusan dan garis panduan boleh menghasilkan untuk mengatasi tergelincir dan jatuh kejadian.