

A STUDY OF THE RESULT OF TARGET BEHAVIOR CHANGE BY APPLIED BEHAVIOR BASED SAFETY AND PROTECTION MOTIVATION THEORY**NICHARUCH PANJAPHOTHIWAT 5536969 PHOH/M****M.Sc, (OCCUPATIONAL HEALTH AND SAFETY)****THESIS ADVISORS : VICHAI PRUKTHARATHIKUL, M.Sc. ,SOMPORN KANTHARADUSSADEE TRIAMCHAISRI, Ph.D. , SUKHONTHA SIRI, Ph.D.****ABSTRACT**

The purpose of this study was to investigate the results of the safety behavioral change process between the Behavior Based Safety (BBS) and the Protection Motivation Theory (PMT) techniques. The subjects were the workers in the polishing department of a factory in Pathumthani province. The participants in this program were divided into two groups, including 10 workers in the BBS group and 10 workers in the PMT group. The study began with the identification of at-risk behaviors and three target safety behaviors were selected according to the prioritized setting. The BBS and the PMT techniques were implemented for 12 weeks. Samples of the participants' safety behaviors were observed and recorded by the participants themselves. In addition, the assessment of knowledge, attitudes and behaviors regarding to safety at work of both target groups were collected by using self-administered questionnaire.

The results showed that the workers in the BBS and the PMT target groups developed increased target safety behaviors compared to before the study from 88.89% to 100% and 92.59% to 98.17%, respectively, at the end of the study. The target safety behaviors before and after the experiment within the BBS group and the PMT group were different significantly ($p=0.039$) and ($p=0.021$), respectively. In contrast, the target safety behaviors before and after the experiment between the BBS and the PMT groups were not different significantly ($p=0.634$). The assessment results from the questionnaire were found that knowledge, attitudes and behaviors regarding safety at work of the BBS and the PMT target groups increased from before the study.

In summary, it was found that both the BBS and the PMT techniques were able to change the safety behaviors of the workers and the results of both techniques were not significantly different. Nonetheless, the PMT technique can be applied using with workers who have less safety skills to those who are skillful. However, the BBS was more effective than PMT when applied to the workers who have already been good in terms of safety skills and the BBS is likely to take shorter time for workers' behavioral change than the PMT technique.

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