Krittika Pilasee 2014: The Relationship Between Big Five Personality Factors and Work Safety Behaviors of Construction Personnal. Master of Engineering (Safety Engineering), Major Field: Safety Engineering, Faculty of Engineering. Thesis Advisor: Associate Professor Korchoke Chantawarangul, Ph.D. 115 pages.

This research studies the factors of personality which is a factor that can affect construction work safety behaviors by using questionnaire tool. The sample group consisted of 134 personnel of construction Industry that work in Chonburi province. The objective is to determine the level of safety and personality behavior of personnel in construction. The relationship between personalities and work safety behavior was analyzed. This research studies the element of personality that can predict work safety behaviors.

The results show that the samples have high level of Agreeableness and Conscientiousness personality, medium score of Extraversion and Openness personality; and have low level of Neuroticism personality, with a mean score 3.86, 3.80, 3.07, 2.89, and 2.56, respectively. From statistical analysis of the relationship between work safety behavior and personality, it was found that the Agreeableness and Conscientiousness Personality are positively related to work safety behavior; Neuroticism personality are negatively correlated with work safety behavior. However, the Extraversion and Openness personality of different levels does not affect the work safety behavior. The studies of Big Five Factors of personality can predict the work safety behavior that the Neuroticism and Consciousness personality when combined together have influences to predict the work safety behavior up to 17.6 percent.

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