Safety Climate Mediating the Relationship between Safety Leadership and Safety Performance in Petrochemical Industries

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ABSTRACT

This study examines relations among three latent variables such as safety leadership, safety climate and safety performance. Employees from 23 plants in seven departments of a petrochemical company in central Taiwan completed a questionnaire survey. A sample of 521 responses was selected by simple random sampling. Structure equation modeling (SEM) analysis using the A-MOS 5.0 was employed to test the hypothesized model relating the variables mentioned above. The results indicate that the model was support, and safety climate mediated the relationship between safety leadership and safety performance. Practical implications of these results for process safety management in the petrochemical industries are discussed.

Keywords: Safety leadership; Safety climate; Safety performance; Structure equation modeling (SEM); Process safety management