TUGAS AKHIR

PENGGUNAAN *COMPARATIVE TEST* DALAM PENILAIAN IKLIM KESELAMATAN KERJA DAN PERANCANGAN *SOFTWARE* KUESIONER NOSACQ-50

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FINAL PROJECT

THE USE OF COMPARATIVE TEST IN SAFETY CLIMATE ASSESSMENT AND THE DESIGN OF NOSACQ-50 QUESTIONNAIRE SOFTWARE

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ABSTRAK

Suatu budaya keselamatan yang buruk telah disorot sebagai penyebab dasar dari beberapa kecelakaan besar dan hebat di dunia industri sejak pertengahan 1980. Di sisi lain, ada sebuah gerakan perubahan dari pengukuran keselamatan *lagging* berdasarkan data retrospektif seperti *lost time accident* menjadi indikator *leading* seperti pengukuran iklim keselamatan dari organisasi. Oleh karena itu, studi tentang penilaian iklim keselamatan sangat penting dilakukan sebagai dasar dalam mengukur dan mengembangkan program *safety performance indicator* di PT. X dan sekaligus secara signifikan dapat membantu perusahaan mengenali *hazard* dalam sebuah sistem dan mencegah resiko kecelakaan secara proaktif.

Penilaian iklim keselamatan dapat dilakukan dengan survei menggunakan kuesioner. Ada banyak kuesioner yang dapat digunakan untuk melakukan survey iklim keselamatan kerja. Salah satunya adalah NOSACQ-50. Kuesioner ini terdiri dari 50 pertanyaan yang mencakup tujuh dimensi yaitu dimensi *management safety priority and ability, management safety empowerment, management safety justice, worker's safety commitment, worker's safety priority and risk non-acceptance, peer safety communication learning and trust in safety ability, worker's trust in efficiency of safety systems.*

Dari pengukuran iklim keselamatan kerja menggunakan NOSACQ-50, terdapat tiga dimensi yang memiliki level baik yaitu dimensi *worker's safety commitment, management safety priority and ability, dan worker's trust in efficiency of safety systems.* Selain itu terdapat empat dimensi yang memiliki level cukup baik, dimana membutuhkan sedikit peningkatan, yaitu dimensi *management safety empowerment*, dimensi *management safety justice*, dimensi *peer safety communication learning and trust in safety ability*, dan *worker's safety priority and risk non-acceptance.* Adapun dimensi dengan nilai tertinggi adalah dimensi *worker's safety commitment memiliki nilai tertinggi* (3,48). Sedangkan nilai terendah yaitu pada dimensi *management safety justice* (3,14). Setelah dilakukan uji komparatif nilai *safety climate* di PT. X dengan menggunakan *Uji Kruskall Wallis* disimpulkan bahwa tidak terdapat perbedaan yang signifikan dari nilai rata-rata (diantara keenam departemen) tiap dimensi iklim keselamatan kerja. Setelah itu, maka dilakukan pembuatan *software* kueisioner NOSACQ-50 menggunakan program *Visual Basic 6.0*, dan dapat disimpulkan bahwa *software* tersebut layak digunakan.

Kata Kunci : Budaya Keselamatan, Iklim Keselamatan, NOSACQ-50, *Kruskal Wallis*, *Visual Basic*

ABSTRACT

A poor safety culture has been highlighted as a root cause of several major accidents in industry since the mid 1980s. Beside that there has been a movement away from lagging measures of safety based on retrospective data, such as lost time accidents and incidents, towards leading indicator like safety climate assessment of the organization. Therefore, the study of the safety climate assessment is very important as a basis for measuring and developing a safety performance indicator program in PT. X and at the same time can significantly help companies identify hazards in a system and proactively prevent the risk of accidents.

Evaluation of safety climate can be done with questionnaire survey. There are many questionnaire which can be used to conduct safety climate survey. One of them is NOSACQ-50. This questionnaire consist of 50 questions covering 7 dimensions those are management safety priority and ability, management safety empowerment, management safety justice, worker's safety commitment, worker's safety priority and risk non-acceptance, peer safety communication learning and trust in safety ability, worker's trust in efficiency of safety systems.

From safety climate assessment by NOSACQ-50, there are 3 dimensions have good level those are worker's safety commitment, management safety priority and ability, and worker's trust in efficiency of safety systems . In addition there are 4 dimensions have fairly good level with slight need of improvement, those are management safety empowerment, management safety justice, worker's safety priority and risk non-acceptance, and peer safety communication learning and trust in safety ability. The dimension with the highest value is worker's safety commitment (3.48). while the dimension with the lowest value is management safety justice (3.14). When comparative test to the safety climate values between 6 department in PT. X by using the Kruskal Wallis test had been done, it can be conclude that there was no significant difference from the mean value (between 6 department) of each dimension of safety climate. After that, so it is made NOSACQ-50 questionnaire software using Visual Basic 6.0 program, and it can be concluded that the software is fit for use.

Keywords : Safety Culture, Safety Climate, NOSACQ-50, Kruskal Wallis, Visual Basic