

[LOG 13] MEASUREMENT OF WORK RELATED ATTITUDE TOWARDS SAFETY PERFORMANCE AT MAIN PORTS IN MALAYSIA

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ABSTRACT

The aim of this study is to determine the relationships between job satisfaction, job commitment and job involvement with safety performance among cargo operators at main ports in Malaysia. The data was collected through online questionnaire survey that was distributed using stratified sampling. The sample consist of 327 of male cargo operators. Multiple regression analysis indicated job satisfaction and job commitment were positively related to safety performance while job involvement was not associated with it. The findings clearly indicate that job satisfaction and job commitment is an option for safety performance whereas job involvement should consider for safety performance in maritime sustainability. Therefore, level of job satisfaction and job commitment with safety performance to ensure that the improvements of this work related attitude may increase the level of safety performance in port industry particularly in Malaysia.

Keywords: *safety performance, job satisfaction, job commitment, job involvement, port industry*

INTRODUCTION

Safety is a major issue as it includes an immeasurably significant issue. It is one of the best approach to prevent accidents that can cause a person to be killed, and permanent damage that can harm the lives of victims or their family members. Safety was carefully thought about as an essential feature in almost all marine operations and as a worker, they have their rights to return home securely from workplace without any injuries and it can be disrupted if they return home in physical injuries and malfunctioned internal organs because of risky at working environment.

In many industries and occupations, safety performance is measured as a serious aspect of job performance and has been measured a direct predictor of occupational in accidents and injuries (Neal & Griffin, 2004). Safety performance is usually supposed to help in distinguishing early signals of performance and cautions if any issues happen in an exceedingly dangerous workplace environment.

This purpose of this measure failed to contemplate accidents, such as close to misses or close to hits, which has the ability to cause broken, injury, harm or loss of property. To measure safety performance in ports, the method that have been used will vary consistent with the problem and organizational operations environment. Therefore, this

study is to determine the uncertainty of safety performance. To determine the components of management that can be utilized to measure the safety performance in the working environment, safety equipment, safety management and organization, safety training evaluation and practices, accident investigations and accident rates will be used (Wu, 2005). The elements of all independence variables in this paper has been tested by using the values of safety performance.

By adapting Wu's dimensions' study, safety performance was measured in this study. The scale of safety performance has six dimensions which are safety equipment and measures, safety organization and management, safety training practice and evaluation, accident investigations, and accident statistics (Wu, 2001). While Wu was checked on safety performance in college research centers, this study was directed on port operations in Peninsular Malaysia which is in different respondents to test and prove that the measurement scale is applicable to all industry. This study explored the safety performance measurement level among cargo operators at the Peninsular Malaysia ports.

PROBLEM STATEMENT

Malaysia is one country that encompasses an area of more astronomical than the land area. The highlight of the maritime Malaysia is a proven fact that it is a country that is the dominant organized by water, with the South China Sea separates Peninsular Malaysia from Sabah and Sarawak. "As the element is greater maritime area in Malaysia, the government has stressed the importance of effective preparation and port facilities sensible for national development and economy" by Malaysia Country Report 2005, Malaysia Marine Department, 2016; The Ninth Malaysia Plan, 2006. Currently, the port has become a main hub for sea transport medium (Nazery Khalid, 2007), which supports economic growth by controlling the transportation business enterprises, energy, labor, food, travel, and general safety activities. Malaysia port organization plays a crucial role in the Malaysian economy to support and improve the management and performance of the ports to attract more users in the future.

According to the Ninth Malaysia Plan (2006-2010), stated that "Malaysia aspires to be a developed country, especially experts in industrial sectors involving import and export shipping facilities that primarily use as their main transport medium". The principle behind the exploitation is for the convenience of shipping and loading effectualness compared to air shipment. Therefore, the management of the port's important to determine effectualness port operations, particularly the performance level of safety among workers when leading the field work. The accident rate in effect on the individual employee will affect the amount of the loss-profit organizations. Therefore, it is necessary for employees to think about safety elements in their work. In addition, this study aims to investigate the level of job satisfaction, job commitment and involvement with work safety performance to ensure that the improvement of work-related attitudes can increase the level of safety performance in the port industry.

LITERATURE REVIEW

Safety performance

There are two ways in weighing performance of safety which are hard and traditional method and could be (objective) act and (perceptual or responsive) act in safety studies (Grimaldi & Simmonds, 1984; Toeller, 2001; Cantarella, 1998; Coyle et al., 1995; Cox & Cox, 1991). Hard performance comprises underdone fiscal figures, cost figures, commands and facilities concentrated, while lenient act contains superior judgments and self-perceived about protection.

The safety model calculated enactment of safety which well-defined as the value of protection that involves in work. Safety-related effort stands considered as the exertions prepared to reach protection (Nevhage & Lindahl, 2008). “Activities which a division head conveys out to make sure the safety” is defined as safety performance (Wu et al., 2009). “The safety performance scale (SPS) was aimed to size plant-level performance of safety. The scale has been reformed and revised to measure plant-level safety performance” by Wu et al. (2008) and Wu, Shu, and Shiau (2007), “which comprised four sub-scales: safety examination, accident analysis, safety preparation, and safety enthusiasm (total 16 items)” by Wu et al. (2008) and Wu, Shu et al. (2007) had presentable strength and reliability of our study.

The theoretical meaning of welfare act denotes to “the broad enactment of the association by protection administration structure in security exercise” (Wu, 2005). In this research, the operational definition of safety performance means “marks measured from the six dimensions on the safety performance scale which conclude safety organization and management, safety equipment and measures, safety training practice, safety training evaluation, accident investigations, and accident statistics” by (Wu, 2005). This reading existed to enlarge Wu’s exploration on care performance and it is a soft methodology to compute protection performance, by forming the used dimensions and relate it into the Malaysian context to test the different context of industry and respondents.

Job satisfaction

Job fulfilment will achieve by someone that feel very pleased with his job in recent society. Conferring to Spector (1997), job happiness can be definite as a delightful or optimistic passionate level causing after assessment of individual’s job or job involvements and an attitudinal viewpoint focused on the perceptive development since workforces be worthy of to be regarded by respect, a symbol of expressive comfort. Based on prior study results from numerous researchers, the greater job gratification can remuneration to the greater presentation in group (Locke, 2004). Furthermore, to obtaining outlooks about their occupations as a complete. Individuals also can gain outlooks about numerous aspects of their occupations such as the kind of work they do, their colleagues, managers or subordinates and their pay (George et al., 2008).

Job commitment

“Commitment is an individual’s wish to continue engrossed and committed to his work. Organizational commitment is measured through three tools; affective, continuance and normative commitment” (Meyer & Allen, 1990). Over the years, commitment has been well-defined and dignified in numerous dissimilar ways. Truly, this shortage of agreement in the explanation of the word has donated significantly to its action as a

multidimensional concept (Meyer & Allen, 1984). All of these meanings mention to a strength that aims an individual's behaviour. In attendance seems to be compromise that the strength is knowledgeable as a mind-set). "Job commitment has three dimensions to be measure which are Affective Commitment, Continuance Commitment and Normative Commitment" (Meyer & Allen, 1997).

Affective commitment

Emotional in obligation states to the worker's expressive affection to, empathy through connection in the group. Personnel per solid stimulating pledge will endure through the group as they wish. Arousing dedicated workers are perceived as obtaining a feel of fitting and credentials that surge their participation in the organization's activities, their enthusiasm to follow the organization's objectives and their aspiration to persist with the organization (Meyer & Allen, 1991; Mowday, Porter, & Steers, 1982).

Continuance commitment

Continuation pledge mentions to a consciousness of the expenditures related with separation the group. The possible costs of parting a group embrace the risk of killing the period and exertion disbursed attaining nonexchangeable abilities, dropping smart remunerations, pulling out seniority-based rights, and distracting individual connection. Besides the costs convoluted in leave-taking a business, continuation assurance likewise progresses such a purpose of a shortage of substitute hire chances. Workers who own main connection to the association will remain by obligation they want. Continuance pledge is "a propensity to 'engage in steady lines of activity' (Becker, 1960, p. 33) based on the individual's gratitude of the 'costs' (or lost side bets) connected with terminating the activity" (Allen & Meyer, 1990, p. 3).

Normative commitment

Normative obligation replicates judgement of requirement to last engagement. Personnel with a great proportion of normative commitment perceive that they should to continue by the group. Wiener (1982) proposes that be aware of duty to stay through an association could be the outcome from the internalization of standardizing forces utilized on different former to access into the relationship (family or cultural orientation), or consecutive entry (organizational orientation). Nevertheless, standardizing commitment might also cultivate once an association offers the worker through "rewards in advance" (e.g. paying college tuition), or gains essential expenses in accommodating occupation. A study showed in the alike environment originate affirmative bond between work stress and structural obligates, affective assurance and continuance assurance, while this encouraging liaison was not proved for normative obligation (Ziauddin, Khan, Jam & Hijazi, 2010).

Job involvement

"Job involvement has been defined as an individual's psychological identification or commitment to his or her job" (Kanugo, 1982). As a mark to which one is impartially engrossed with, involved in, and troubled with one's current profession (Paullay et al., 1994). Involvement in the work comprises the embodying of standards about the integrity of the effort or the prominence of work in the value of the person (Lodahl & Kejner, 1965). Furthermore, people who show extraordinary participation in their works will contemplate their effort with significantly which part of their living and whether or not they sense respectable about themselves is thoroughly linked to in what way they accomplish on their careers. Due of this, individuals who are sincerely care

in involvement of the job and worried about their work (Kanugo, 1982). In this study, “job involvement is the non-dimensional variable which consisted of 10-item job involvement scale. This scale dealings job involvement on a five-point Likert scale with responses ranging from “Strongly disagree” (1) to “Strongly agree” (5)” (Kanugo, 1982). Kanugo (1982) discovered the scale of this study will have a Cronbach Alpha coefficient of 0.81, which specifies a rationally great magnitude of interior solidity, and consequently a sensibly better level of reliability and construct validity. Latest studies of job participation illustrate that this participation improves the personality’s fulfilment, nevertheless at the same period accumulative effectiveness for the industry (Hall and Lawler, 2000).

The underpinning theory- Social Exchange Theory

Social Exchange Theory is significance to our study by providing a potential theoretical foundation for interpretation the connection between persons and their work in an association. Compared to workforces who are not satisfied, it is claimed that workers who are contented with their engagement bond will have a better progressive exchange liaison due to their insights of equality of rewards. There is a huge body of proof to advise that (pleased, participation and dedicated) employees, hence respond in relations that will advantage the institute (Hofmann, 2005). In Cook’s article, the writer; Homans (1961) defined “social behaviour and the forms of social organization produced by social interaction by showing how A’s behaviour reinforced B’s behaviour (in two party relation between actors A and B) and how B’s behaviour reinforced the A’s behaviour in return”. His main focus was social behaviour that explained as an outcome of social developments of common underpinning and the disadvantage of it. Relations might also dismiss on the foundation of the catastrophe of underpinning. A study by Cropanzo and Mitchell (2005), there are a few researcher were explaining the theory such as (Molm, Peterson, & Takahashi, 1999) that explained value of social exchange theory had fallen in such variety areas as social power, linkages (Brass, Galaskiewicz, Greve, & Tsai, 2004; Cook, Molm, & Yamagishi, 1993), board independence (Westphal & Zajac, 1997), administrative fairness (Konovsky, 2000), psychological agreements (Rousseau, 1995), and control (Liden, Sparrowe, & Wayne, 1997) amongst others studies. Nevertheless, current criticisms have highlighted difficulties fronting the theory. For example, Coyle-Shapiro and Conway (2004) argued theoretic uncertainties and experimental requirements, whereas Cropanzano, Rupp, Mohler, and Schminke (2001) opposed repeated confusions of the common SET model.

“The central of this theory is linking job satisfaction, job commitment and job involvement to safety is best provided by the Social Exchange Theory” (Blau 1964). Conferring to social exchange theory, it could be mutual relations between an occupational approach (job satisfaction, job commitment and job involvement) to a union and the provision given to the worker in return for that outlook (Gouldner 1960).

OBJECTIVE OF THE STUDY

The study was carried out with the following objectives.

1. To determine the influences of job satisfaction towards safety performance of cargo operators at main ports in Malaysia.
2. To determine the influences of job commitment towards safety performance of cargo operators at main ports in Malaysia.

3. To determine the influences of job involvement towards safety performance of cargo operators at main ports in Malaysia.

METHODOLOGY

Type of research

This research is to investigate the relationship between job satisfaction, job involvement and job commitment towards safety performance. This study uses a causal effect research and delegate as correlation research. Zikmund, Babin, Carr and Griffin (2012) has characterized causal research as research directed to distinguish the way of cause and influence connections among factors when the exploration issue has as of now been barely characterized.

Research design

To answer all the question and test the hypotheses in this research, we used a quantitative research. This questionnaire is to examine the relationship between independent variables and dependence variable in this research. In this study, quantitative approach was used because the quantitative approach was used in this study because it takes a different stance towards members and it generally consistent crosswise over time and settings. A correlation design was to depict the relationship between variables in this research.

Research hypothesis

These hypotheses in this research are produced in view of measurements to depict direction, form and level of relationship between all independents variables and dependence variable. Based on the research objectives and questions in this paper, the hypothesis was developed. Based on that, the hypotheses of this research are shown in Table 1.

Table 1
Research questions and research hypotheses

Research Questions	Hypotheses
1. Do job satisfaction influence on performance of cargo operators in port?	H1. There is a significant relationship between Job Satisfaction and Safety Performance.
2. Do job commitment influence on safety performance of cargo operators in port?	H2. There is a significant relationship between Job Commitment and Safety Performance
3. Do job involvement influence on safety performance of cargo operators in port?	H3. There is a significant relationship between Job Involvement and Safety Performance

THEORETICAL FRAMEWORK

In this research, job satisfaction, job involvement and job commitment is an independence variable while safety performance is a dependence variable. The research framework has shown in Figure 1.

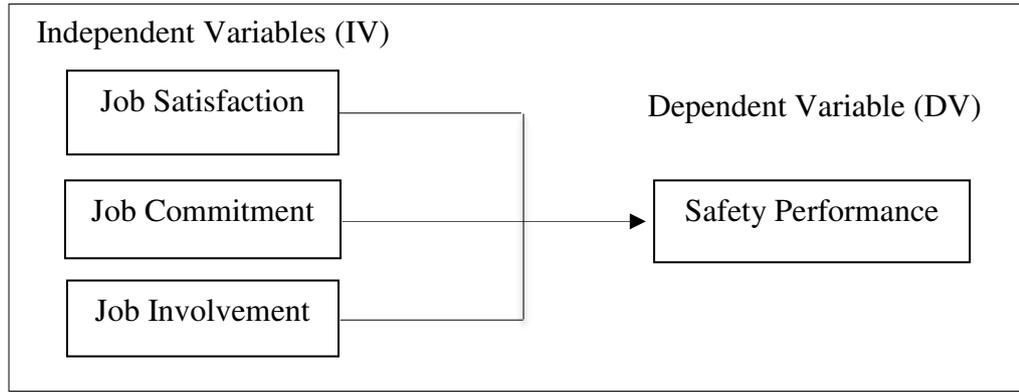


Figure 1
Research framework

Research instrument

Questionnaire development

The questionnaire in this research was divided into two sections which is the first section is about demographic while the second section is about the independent and dependent variable and had 147 items in the questionnaire.

Population and sampling method

For this research, the population is among cargo operators in main ports of Malaysia. According to Malaysia Department of Sea (2016), the amount of cargo operators is around 1600 employees in major port. For this study, we only took 400 operators from North Port, 600 operators from West Port, 200 operators from Kuantan Ports and 400 operators from Penang Port (Lembaga Pelabuhan Malaysia, 2016). The major ports in Peninsular Malaysia only covered in this study and according to Krejcie & Morgan (1970) only 327 employees was suggested response rate because this sample size is relevant for the population and sample size for this research. 396 questionnaires were distributed to the cargo operators at that main ports.

DISCUSSION OF FINDINGS

Table 2
Correlation statistics

Variables	r ²
Job Satisfaction	0.676
Job Commitment	0.726
Job Involvement	0.414

Overall, all the constructs have shown an acceptable strength of the relationship between them at $p < 0.01$ level. The strength of all correlations between all variables was significant and acceptable in this study as it was statistically significant. In this study the relationship of all variables had positive significant correlation.

Table 3
Regression statistics

Variables	R ²	F
All Independence Variables (IV)	0.650	202.377

Variables	β
Job Satisfaction	0.437
Job Commitment	0.399
Job Involvement	0.022

Based on Table 3, it shows that 3 predictors (job satisfaction, job commitment and job involvement) are explaining 65.3% variance in safety performance while 34.7% of variance in constant variable might be explained by other variables.

CONCLUSION

This study has accomplished its objectives to determine the safety performance level among main ports in Peninsular Malaysia and to test the relationships between all variables in this study. This study has given great results by using appropriate research instruments in measuring the safety performance in main ports in Malaysia. This study gives a principles and theoretical basis that should to be consider in future research.

This study additionally disclosed the findings that may function a basis for future researches and practices. The acquired outcomes show that every variable in this research have positive significant relationship among them. Besides that, the results of this research can give some momentum for future researches that aim to manage the central issues that have an effect on the management of safety performance in all area works. Last but not least, this research also provides the basis results for the implications to professionals for further research on safety performance. The findings of this research can help ports especially major ports in Malaysia to be more effectively and efficiently develop and organize the safety performance of safety activities in their industry.

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