FACTORS INFLUENCE OSH ACCEPTANCE IN KENCANA TORSCO SDN BHD, SITIAWAN, PERAK

DINESH KUMAR K. KRISHNAN

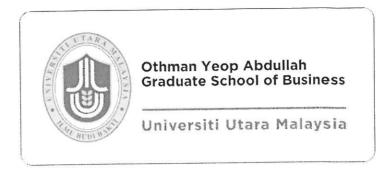
MASTER OF SCIENCE
UNIVERSITI UTARA MALAYSIA
July 2013

FACTORS INFLUENCE OSH ACCEPTANCE IN KENCANA TORSCO SDN BHD, SITIAWAN, PERAK.

DINESH KUMAR A/L K.KRISHNAN

807845

Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
in Fulfilment of the Requirement for the Master of Science



PERAKUAN KERJA KERTAS PROJEK

(Certification of Project Paper)

Saya, mengaku bertandatangan, memperakukan bahawa (*I, the undersigned, certified that*) **DINESH KUMAR A/L K. KRISHNAN (807845)**

Calon untuk Ijazah Sarjana (Candidate for the degree of) MASTER OF SCIENCE (OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT)

telah mengemukakan kertas projek yang bertajuk (has presented his/her project paper of the following title)

FACTORS INFLUENCE OSH ACCEPTANCE IN KENCANA TORSCO SDN. BHD. SITIAWAN, PERAK

Seperti yang tercatat di muka surat tajuk dan kulit kertas projek (as it appears on the title page and front cover of the project paper)

Bahawa kertas projek tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan.

(that the project paper acceptable in the form and content and that a satisfactory knowledge of the field is covered by the project paper).

Nama Penyelia

(Name of Supervisor)

ENCIK ISMANDI BIN WASLI

Tandatangan (Signature)

09 APRIL 2013

Tarikh

(Date)

PERMISSION TO USE

In presenting this thesis in partial fulfillment of the requirements for a master degree

from Universiti Utara Malaysia, I agree that the University Library may make it freely

available for inspection. I further agree that permission for copying this thesis in any

manner, in a whole or in part, for scholarly purposes may be granted by my supervisor

or, in his absence, by the Dean of Othman Yeop Abdullah Graduate School of Business

where I did my thesis. It is understood that any copying or publication or use of this

thesis or parts thereof for financial gain shall not be allowed without my written

permission. It is also understood that due recognition shall be given to me and to

Universiti Utara Malaysia for any scholarly use which may be made of any material

from this thesis.

Requests for permission to copy or to make other use of material in this thesis, in whole

or in part shall be addressed to:

Dean of Othman Yeop Abdullah Graduate School of Business

Universiti Utara Malaysia

06010 UUM Sintok

Kedah Darul Aman

iii

Abstract

This research paper presents the success factor in the acceptance towards Occupational Safety and Health (OSH). OSH acceptance among human being can be varies among us and be influenced with certain factors. However, the study is to identify which factors that influences most in the success of Safety and Health in an organization. There are many sectors in Malaysia that are actually not really fully complying towards our Occupational safety and Health Act (OSHA) 1994 that can lead to many serious workplace incident and fatality as well. OSH is big terms that represent the company's backbone. The weak and strength of OSH in an organization will define the strength and weak the organization will be. Furthermore, OSH cannot move alone by itself, therefore the success of OSH at a workplace can be seen if there is two parties make the same approach and responsibilities that enable the OSH become more effective. This is all about management commitment and employees acceptance and support towards OSH. Therefore the objective of this paper is to find out what are the needs to improve OSH in the organization that are influenced by human factor.

Abstrak

Kertas kajian ini mendedahkan faktor kejayaan penerimaan terhadap Keselamatan dan Kesihatan Pekerjaan (OSH) . Penerimaan terhadap Keselamatan dan Kesihatan Pekerjaan (OSH) boleh dilihat dikalangan ketika sendiri dan juga dipengaruhi dengan pelbagai faktor. Walaubagaimanapun, tujuan kajian adalah untuk mengenalpasti faktor utama yang mempengaruhi kejayaan Keselamatan dan Kesihatan dalam sesebuah organisasi. Kebanyakan sektor di Malaysia tidak sepenuhnya mematuhi piawaian terhadap Akta Keselamatan dan Kesihatan Pekerjaan (OSH) 1994 dan ianya mendorong berlakunya kemalangan di tempat kerja serta kematian. Keselamatan dan Kesihatan Pekerjaan (OSH) merupakan tulang belakang sesebuah organisasi. Kelemahan dan kekuatan Keselamatan dan Kesihatan Pekerjaan (OSH) boleh membuktikan kegagalan dan kekukuhan dalam sesebuah organisasi tersebut. Tambahan lagi, Keselamatan dan Kesihatan Pekerjaan (OSH) tidak mampu bergerak secara sendirian, oleh yang demikian kejayaan Keselamatan dan Kesihatan Pekerjaan (OSH) boleh dilihat sekiranya dua pihak sepakat melaksanakan suatu pendekatan serta bertanggungjawab bagi membolehkan Keselamatan dan Kesihatan Pekerjaan (OSH) dapat dilaksanakan secara efektif. Ianya berkait rapat dengan komitment daripada pihak atasan serta penerimaan dan sokongan dari pekerja terhadap Keselamatan dan Kesihatan Pekerjaan (OSH). Justeru itu, objektif kertas kajian ini adalah untuk mengenalpasti kehendak atau matlamat dalam meningkatkan mutu Keselamatan dan Kesihatan Pekerjaan (OSH) dalam sesebuah organisasi dan ianya didorong oleh pengaruh manusia.

ACKNOWLEGDEMENT

I would like to thanks my research supervisor, En. Ismandi Wasli and Dr. Mohd Faizal Mohd Isa, for thier guidance, encouragement, advice and support in order for me to complete this project.

Another special appreciation to my supervisor En. Ismandi Wasli for his cooperation in allowing his own Master Thesis as a guideline for my reference.

I would like to express my appreciation to my academic friends for their support during our class discussion, research proposal and contribution on ideas during the formulation of this project paper.

Next, I would like to thank my employer, Kencana Petroleum and all its staffs for their active participations on my case study that all of them participate willingly and whole heartedly.

Last but not least, special thanks to my family members for their constant reminder and support on me to finish up this project paper and all the guidance they had showered to me.

Thank you.

TABLE OF CONTENTS

NO.	CONTENTS	PAGES
PERMISSION TO USE		iii
ABSTRACT		iv
ABSTRAK		v
ACKNOWLEDGEMENT		vi
TABLE OF CONTENT		vii
LIST OF TABLE		xi
LIST OF FIGURE		xiii
LIST OF ABRAVIATION		xiv
Chapter 1 Introduction		
1.1 Introduction		1
1.2 Kencana Torsco Sdn Bho	I	2
1.3 OSH Implementations in	Kencana Torsco	4
1.4 Research Problem		5
1.5 Research Objectives		6
1.6 Research Questions		7
1.7 Significance of the Study	,	7
1.8 Time Limitations		8
1.9 Research Framework		9

Chapter 2 Literature review

2.1 Introduction	11
2.2 Employee's Safety and Health	11
2.3 Management Review and involvement in OSH Procedure acceptance among worker2.4 Demographic factors in the level of acceptance of OSH procedures	13
among employees	15
2.4.1 Age	16
2.4.2 Working Years	17
2.4.3 Gender	18
2.4.4 Training Attendance	18
2.5 Attitude & OSH Acceptance	19
2.6 Trainings & OSH Acceptance	22
2.7 Research Hypotheses	26
Chapter 3 Methodology	
3.1 Introduction	28
3.2 Research Design	28
3.3 Research Population	29
3.4 Research Sample	29
3.5 Research Instrument	29
3.6 Procedure for Data Collection	31
3.7 Data Analysis	31

3.8 Pilot Test	33
3.8 Conclusion	34
Chapter 4 Result	
4.0 Introduction	35
4.1 Respondent Rate	35
4.2 Reliability Analysis	36
4.3 Respondent Demography	36
4.3.1 Age Analysis	37
4.3.2 Employees Duration of Service Analysis	38
4.3.3 Safety Training Attendance Analysis	39
4.3.4 Educational Background	40
4.3.5 Occupational Level Analysis	41
4.4 Mean Analysis	41
4.5 Inferential Analysis	42
4.5.1 Hypotheses 1	43
4.5.2 Hypotheses 2	44
4.5.3 Hypotheses 3	45
4.5.4 Hypotheses 4	47
4.5.5 Hypotheses 5	50
4.5.6 Hypotheses 6	51
4.5.7 Hypotheses 7	52
4.6 Conclusion	54

Chapter 5 Discussion / Conclusion / recommendations

5.0 Introduction	56
5.1 Discussion	56
5.2 Recommendations	61
5.3 Limitations	64
5.4 Conclusion	64
REFERENCES	67
GLOSSARY	71
APPENDIX	78

LIST OF TABLES

Table 3.7	Score Range Distribution	33
Table 3.8	Reliability Test Result for Pilot Study	34
Table 4.2	Comparison of the Reliability Test between Actual	
	Research and Pilot Study	36
Table 4.3.1	Respondents' Age Frequency	37
Table 4.3.2	Respondents Frequency on Duration of Service	38
Table 4.3.3	Respondents Frequency on Safety Training Attendance	39
Table: 4.3.4	Educational Background of Respondents	40
Table: 4.3.5	Level of Posts Held by Respondents	41
Table 4.4	Mean for Level of Acceptance and Application of	
	Occupational Safety and Health Procedures, Employees	
	Attitude and Safety Training Attended	41
Table 4.5.1	Pearson Correlation between attitude factor and level	
	of Acceptance and application of occupational safety	
	and health procedures.	43
Table 4.5.2	Pearson Correlation between safety training variable and	
	level of OSH acceptance and application.	45
Table 4.5.3(a)	Mean for level of OSH procedures acceptance	
	application for male and female employees.	46
Table 4.5.3(b)	T-test Analysis between gender variable and OSH	
	procedures acceptance and application level.	46

Table 4.5.4(a)	Mean for level of acceptance and application of	
	Occupational safety and health procedures for those	
	who attend and do not attend OSH training.	48
Table 4.5.4(b)	T-Test Results for OSH training attendance with	
	level of OSH procedures acceptance and application.	48
Table: 4.5.5	ANOVA analysis table for age factor with	
	OSH procedures application and acceptance level.	50
Table 4.5.6	ANOVA analysis table for duration of service and	
	OSH acceptance and application level.	51
Table 4.5.7:	Regression analysis table for attitude variable	
	and OSH training.	52
Table 4.6	Summary of Findings	55

LIST OF FIGURES

Figure 1.9 Research Framework

9

LIST OF ABBREVIATIONS

No.	Abbreviations	Meaning
1.	0	Degree sign
2.	N	Frequency
3.	%	Percentage
4.	≥	More or equal to
5.	<u></u>	Less or equal to
6.	r	Pearson Product Correlation Coefficient
7.	LBP	Low Back Pain
8.	ANOVA	Analysis of Variance
9.	CI	Confidence Interval
10.	H_1	Alternative Hypothesis
11.	H_0	Null Hypothesis
12.	HSAH	Hospital Sultan Abdul Halim, Sungai Petani.
13.	ICC	Intraclass Correlation Coefficient
14.	LS	Likert Scale
15.	MDT	Multidisciplinary Team
16.	NGRS	Numerical Graphic Rating Scale
17.	SD	Standard Deviation
18.	SPSS	Statistic Package for Social Science
19.	UUM	Universiti Utara Malaysia
20.	VAS	Visual Analog Scale

CHAPTER 1

INTRODUCTION

1.1 Introduction

This research is a case study in a local company in Lumut, Perak engaged mainly in oil and gas fabrication industry with large steel structural fabrication yards. The research is aimed to identify the level of acceptance and application of employees to Occupational Safety and Health (OSH) procedures in the organization. This research specifically also looked at the relationship of demographic factors such as gender, age, education, years of experience, training and employees attendance in safety training towards level of acceptance and application of employees towards Occupational Safety and Health (OSH) procedures.

Employers have a duty of care to ensure that employees and any other person who may be affected by the companies undertaking physical activities remain safe at all times. The employer must ensure the company maintains certain HSE standards at all times for the beneficial of the employees and empoyer itself. Hence the level of acceptance on the OSH policies and procedures are deemed vital to ensure nobody get hurts and as a pre requisite legal requirements. Employees acceptance towards OSH

The contents of the thesis is for internal user only

REFERENCES

- Abdul Kudus Abu Bakar. (2000). *Kepemimpinan transformasi: hubungan dengan kepuasan kerja dan motivasi guru* (Master's thesis). Universiti Utara Malaysia, Sintok
- Aksorn, T. & Hadikusumo, B.H.W. (2008). Critical success factors influencing safety program performance in Thai Construction projects. *Safety Science*, 46, 709-727.
- Anton, T.J. (1989). *Occupational Safety and Health Management*. Retrieved online July18,2012from http://www.google.com.my/search?sourceid=navclient&ie=UTF-&rlz=1T4WZPC_enMY393MY432&q=anton+1989
- Bennett, J.D. & Passmore, D.L. (1986). Multinomial logit analysis of injury severity in U.S. underground bituminous coal mines. *Accident Analysis and Prevention* 17(5), 399-408.
- Boylston, R.P. (1990). Managing Safety and Health Programs. Wiley & Sons,
- Breslin, F. P. (2007). Workplace Injury towards a gendered understanding of injuries and complaints among young workers. *Social Science and Medicine*, 782-793.
- Cherns, A.R.(1996). Accident at work. Society Problem and methods of study, 210.
- Cooper, C. L. & Marshall, J. (1976). Occupational sources of stress: a review of the literature relating to CHD and mental ill-health. *Journal of Occupational Psychology*, 49, 11-28.
- Demir, F. (2005). Militarization of the market and rent seeking coalitions in Turkey. *Development and Change 36*(4), 667-690.
- Ferika Özer Sarıa.(2009). Effects of employee trainings on the occupational safety and health. *World Conference on Educational Sciences* 2009, 1865–1870.

- Fernández-Muñiz. J. M. (2008). Relation between occupational safety management and firm performance. *Safety Science*, 991.
- Fernández-Muñiz, J. M. (2009). Relation between occupational safety management and firm performance. *Safetylit*, 47(7). 980-991.
- Griffin, M. A. (2006). Safety Climate and Safety Behaviour. *Australian Journal of Management*, 77. Retrieved Online Jun 12, 2012 from http://psycnet.apa.org/journals/apl/94/5/1103/
- Hovden, E. (1999) 'As if Nature Doesn't Matter: Ecology, Regime Theory and International Relations, *Environmental Politics* 8(2), 50–74.
- Hovden, J. (2008). The safety representative under pressure. A study. *Safety Science*. 46, 493–509.
- Hyde, J. S. (1981). How large are cognitive gender differences? A meta-analysis using _2and d. American Psychologist, 36, 892–901.
- Iverson, R. D. (1997). Predicting Occupational Injury: The role of affectivity. *Occupational and Organisational Pschology*, 113-128.
- Kaynak, H. (2003). The relationship between total quality management practices and their effects on firm performance. *Journal of Operations Management*, 21 (4),405-35276.
- Koh, D. (1995). *Occupational health*. Retrieved online August 12, 2012 from http://medtextfree.wordpress.com/2011/11/06/8-6-occupational-health/.
- Maiti, J. & Bhattacharjee, A. (1999). Evaluation of risk of occupational injuries among underground coal mine workers through multinomial logit analysis. *Journal of Safety Research* 30(2), 93-101.
- Maiti, J. & Paul, P.S. (2006) . *The role of behavioral factors on safety management in underground mines*. Retrieved online July 12, 2012 from http://www.sciencedirect.com/science/article/pii/S0925753506000737

- McCrae, R. R.& Costa, P T.(1985). Openness to experience. *Perspectives in personality* (Vol. 1. pp. 145-172). Greenwich.CT: JAI Press. Retrieved online July 18,2012fromhttp://psych.colorado.edu/~carey/Courses/PSYC5112/Readings/psnBig5_Mccrae03.pdf.
- McCrae, R. R. & Costa, P. T. (1991). The NEO Personality Inventory: Using the five-factor model in counseling. *Journal of Counseling and Development*, 69,367-372.
- Mohamed, S.(1999). Empirical Investigation of Construction Safety Management Activities and Performance in Australia. *Safety Science*. 33 (3): 129-142.
- Paul, E. S., Suzy, F. & Theresa, D. (2005). *Emotions, Violence, and Counterproductive Work Behavior*. Retrieved online July 18, 2012 from http://www.corwin.com/upm-data/8744_KellowayCh3.pdf.
- Paul, P.S. & Maiti, J.P. (2007). The role of behavioral factors on safety. *Safety Science*, 45, 449–471.
- Pirani, M. & Reynolds, J. (1976). Gearing up for safety. *Personnel Management*, 19, 25-29.
- Popkin, S. M. (2008). Age is more than Number: Implication for an aging workforce in the US Transportation. *Applied Ergonomins*, 549.
- Quinn, R.P. & Staines, G.L. (1979). *The 1977 Quality of Employment Survey*. Ann Arbor, MI: Institute for Social Research, University of Michigan. Retrieved onlineAugust20,2012from http://familiesandwork.org/3w/research/downloads/3w.pdf.
- Reynolds, P. A. (1976). Gearing up for safety. *Personnel Mnamagement*, 25-29. Retrieved online August 20, 2012 from http://www.aprs.com.au/australian-safety-news/perimeter-scaffold.
- Robbins, S. P. (2001). *Organisational Behviour*. Upper Saddle River.NJ- Prentice Hall.

- Sawacha, E. (1998). Factors affecting safety performance. *International Journal of Project Management*, 17, (5), 309-315.
- Sawacha, E., Naoum, S. & Fong, D. (1999). Factors affecting safety performance on construction sites. *International Journal of Project Management*, 17, (5), 309-315.
- Smile. (2006). *Criteria for Evaluating an Occupational Safety and Health Program*. Retrieved online August 20, 2012 from http://www.wbdg.org/ccb/OSHA/29cfr1915.pdf
- Sutherland, V. C.(1991). Personality stress and accident involvement in the offshore and gas indusry. 204. Retrieved online July 18, 2012 from http://www.sciencedirect.com/science/article/pii/019188699190103I
- Thanet Aksorn. (2008). Critical success factors influencing safety program performance in Thai construction projects. *Construction Engineering and Infrastructure Management*, School of Civil Engineering, 727.
- Torp, S. & Moen, B.E. (2005). The effects of occupational health and safety management on work environment and health: A prospective study. *Applied Ergonomics*, 37, 775–783. Retrieved online August 18, 2012 from http://www.iea.cc/upload/elsevier Torp.pdf.
- Winder, A.M. (2009). Managing hazards in the workplace using organisational safety. *Journal of Risk Research*, 343.
- Zuckerman, M. (1984). Sensation seeking: A comparative approach to a human trait. *Behavioral and Brain Sciences*, 7, 413-471.