

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



**THE INFLUENCE OF SAFETY CLIMATE ON SAFETY PERFORMANCE
IN SERDANG HOSPITAL**

MUTHURAMAN A/L SELLATHURAI PATHAR



Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
In fulfillment of the Requirement for the Master of Sciences
(Occupational Safety and Health Management)

PERMISSION TO USE

In presenting this thesis in fulfillment of the requirements for a Post Graduate degree from the Universiti Utara Malaysia (UUM), I agree that the Library of this university may make it freely available for inspection. I further agree that permission for copying this thesis in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor(s) or in their 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 of it 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 the UUM in any scholarly use which may be made of any material in my thesis.

Request for permission to copy or to make other use of materials in this thesis in whole or in part should be addressed to:

Dean of Othman Yeop Abdullah Graduate School of Business
Universiti Utara Malaysia
06010 UUM Sintok
Kedah Darul Aman



ABSTRACT

This aim of the study is to determine the influence of safety climate on safety performance of the healthcare workers in Serdang Hospital. The health services will always be exposed to the risk of accidents or incidents in the workplace. However, safety climate is something fairly new to the healthcare industry. Furthermore, the hospital staff might have different perceptions on safety performance, safety climate and patient safety in response to the type of employer, work environment and regulations. The six dimensions of safety climate in this study are management safety practices, supervisory safety practices, safety attitude, safety training, job safety and co-workers safety practice. To achieve the objectives of the study, a total 150 sets of questionnaires was distributed to the hospital staff concern randomly. Quantitative data was analysed using SPSS software. It includes Descriptive Statistical Analysis, Reliability Test and Pearson Correlation Test. In addition, Multiple regression test was used to test the hypotheses. Meanwhile, all safety climate dimensions have significant relationship with safety performance. Finally, the implication of this study and direction for future research was discussed.

Keywords: Safety Climate, Safety Performance, Safety Compliance, Safety Participation

ABSTRAK

Tujuan kajian ini adalah untuk menentukan pengaruh iklim keselamatan terhadap prestasi keselamatan pekerja kesihatan di Hospital Serdang. Perkhidmatan kesihatan akan sentiasa terdedah kepada risiko kemalangan atau insiden di tempat kerja. Walau bagaimanapun, iklim keselamatan adalah sesuatu yang baru untuk industri penjagaan kesihatan. Selain itu, kakitangan hospital mungkin mempunyai persepsi yang berbeza tentang prestasi keselamatan, iklim keselamatan dan keselamatan pesakit sebagai tindak balas kepada jenis majikan, persekitaran kerja dan peraturan. Enam dimensi iklim keselamatan dalam kajian ini adalah amalan keselamatan pengurusan, amalan keselamatan penyeliaan, sikap keselamatan, latihan keselamatan, keselamatan kerja dan amalan keselamatan bersama pekerja lain. Untuk mencapai matlamat kajian ini, seramai 150 set soal selidik diedarkan kepada kakitangan hospital secara rawak. Data kuantitatif dianalisis menggunakan perisian SPSS. Ia termasuk Analisis Statistik Deskriptif, Ujian Kebolehpercayaan dan Ujian Korelasi Pearson. Di samping itu, ujian Regresi berganda digunakan untuk menguji hipotesis. Sementara itu, semua dimensi iklim keselamatan mempunyai hubungan yang signifikan dengan prestasi keselamatan. Akhirnya, implikasi kajian dan hala tuju kajian masa depan ini dibincangkan.

Kata Kunci: Iklim Keselamatan, Prestasi Keselamatan, Pematuhan Keselamatan, Penyertaan Keselamatan

ACKNOWLEDGEMENT

I am grateful to my supervisor Dr Munauwar Mustafa for his patience and support in overcoming numerous obstacles I have been facing through my research. I would like to thank the hospital staff of Serdang Hospital for their participation in the survey who supported my work in this way and helped me get results of better quality. Lastly would like thank my family for their support in continuing my studies.



TABLE OF CONTENTS

TITLE PAGE	i
CERTIFICATION OF PROJECT PAPER	ii
PERMISSION TO USE	iii
ABSTRACT	iv
ABSTRAK	v
ACKNOWLEDGEMENT	vi
TABLE OF CONTENT	vii
LIST OF TABLES	xi
LIST OF FIGURES	xii
LIST OF ABBREVIATION	xiii
LIST OF APPENDICES	xiv
CHAPTER 1	
INTRODUCTION	1
1.1 Background of the Study	1
1.2 Problem Statement	5
1.3 Research Questions	8
1.4 Research Objectives	9
1.5 Scope of the Study	9
1.6 Limitations of the Study	10
1.7 Significance of the study	10
1.8 Organization of Thesis	11
1.9 Chapter Summary	11
CHAPTER 2	
LITERATURE REVIEW	12
2.1 Introduction	12
2.2 Safety Performance	14
2.2.1 Definitions of Safety Performance	16
2.2.2 Dimensions of Safety Performance	16
2.2.3 Instruments of Safety Performance	17
2.3 Safety Climate	18
2.3.1 Definitions of Safety Climate	18

2.3.2	Dimensions of Safety Climate	20
2.3.2.1	Management Safety Practices	21
2.3.2.2	Supervisory Safety Practices	22
2.3.2.3	Safety Attitude	23
2.3.2.4	Safety Training	24
2.3.2.5	Job Safety	24
2.3.2.6	Co- Workers Safety Practice	25
2.3.3	Instrument of Safety Climate	27
2.4	Relationship between Safety Compliance and Safety Participation	28
2.5	Conclusion	28
CHAPTER 3		
RESEARCH METHODOLOGY		29
3.1	Introduction	29
3.2	Research Framework	29
3.3	Research Hypotheses	30
3.3.1	Hypothesis 1	31
3.3.2	Hypothesis 2	31
3.3.3	Hypothesis 3	31
3.3.4	Hypothesis 4	32
3.3.5	Hypothesis 5	32
3.3.6	Hypothesis 6	32
3.3.7	Hypothesis 7	32
3.4	Research Design	33
3.5	Operational Definition	33
3.5.1	Safety Performance	33
3.5.2	Safety Compliance	34
3.5.3	Safety Participation	35
3.5.4	Management Safety Practice	36
3.5.6	Supervisory Safety Practice	36
3.5.7	Safety Attitude	37
3.5.8	Job Safety	38
3.5.9	Co-Worker Safety Practice	38

3.6	Measurement of Variables	39
3.7	Population	40
3.8	Sampling	40
3.9	Data Collection	41
3.10	Techniques of Data Analysis	42
3.11	Conclusion	43
CHAPTER 4		
RESULTS AND DISCUSSION		44
4.1	Introduction	45
4.1.1	Studied Variables	46
4.2	Reliability Test	47
4.3	Normality Test	48
4.4	Research Result Summary	48
4.5	Conclusion	49
CHAPTER 5		
DISCUSSION AND CONCLUSION		50
5.1	Introduction	50
5.2	Discussion	50
5.2.1	The Relationship Between Management Safety Practices with Dependent Variable	52
5.2.2	The Relationship Between Supervisory Safety Practices with Dependent Variable	53
5.2.3	The Relationship Between Safety Attitude with Dependent Variable	53
5.2.4	The Relationship Between Safety Training with Dependent Variable	54
5.2.5	The Relationship Between Job Safety with Dependent Variable	55
5.2.6	The Relationship Between Co- Workers Safety Practice with Dependent Variable	55
5.2.7	The Influence of Safety Climate Dimension on Safety Performance	
5.3	Implications of Research	56

5.4	Recommendations	57
5.4.1	Recommendation to the Organization	57
5.4.2	Recommendation for Future	59
5.5	Conclusion	59
6.0	REFERENCES	60
	APPENDIX	68



LIST OF TABLES

Table 3.1	Summary of Assessment Instrument	39
Table 3.2	Sample composition by Hospital staff Operating Department/Wards	41
Table 4.1.1	Research Samples Feedback Ratio (n=92)	44
Table 4.1.2	Demographic Studies	45
Table 4.1.3	Mean and Standard Variation	46
Table 4.2	Variable Coefficient Reliability Study (n = 92)	48
Table 4.4	Research Hypotheses Summary	48



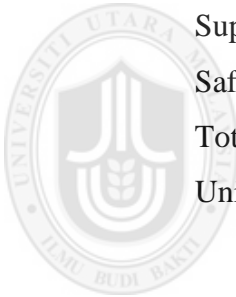
LIST OF FIGURES

Figure 1	Number of Accident Reported 2012 – 2016	2
Figure 2	Number of Industrial Accidents 2012 – 2016	3
Figure 3	Number of Commuting Accidents 2012 - 2016	3
Figure 4	The drawing on Borman and Motowidlo's task and contextual performance	13
Figure 5	Conceptual Framework Study	30



LIST OF ABBREVIATIONS

CWSP	Co-Workers Safety Performance
DOSH	Department Occupational Safety and Health
JSafety	Job Safety
LTI	Lost Time Injuries
OSHA	Occupational Safety and Health Act 1994
PPE	Personal Protective Equipment
MSP	Management Safety Performance
SKVE	South Kajang Valley Expressway
SEM	Structural Equation Modelling
SOCSSO	Social Security Organisation Malaysia
SAAtt	Safety Attitude
SP	Safety Performance
SSP	Supervisory Safety Performance
STra	Safety Training
THIS	Total Hospital Information System
UPM	Universiti Putra Malaysia



Universiti Utara Malaysia

LIST OF APPENDICES

APPENDIX 1	<i>Soal Selidik Kajian Pengaruh Iklim Keselamatan Ke Atas Prestasi Keselamatan Di Kalangan Pekerja Di Hospital Serdang</i>	73
APPENDIX 2	Questionnaire on The Influence of Safety Climate on Safety Performance in Serdang Hospital	80



CHAPTER 1

INTRODUCTION

1.1 Background of The Study

The number of occupational accidents and diseases in healthcare sector are infrequently exposed to news comparative to other sectors such as construction or manufacturing industries. Although the rate of death or injury due to occupational accidents not as high as the rate of loss of life caused by road accidents, but this should not be taken lightly as they involve human capital is a contributor to economic development and the administrative machinery of the state.

Unfortunately, most of the accidents that occur repeatedly as if precautions are not affected because we do not study and learn from the weaknesses that exist. To make it worse when there are some people to be indifferent to the issue of job safety and considers it an accident of fate or destiny that was going to happen and cannot be avoided.

Typically, occupational accidents occur due to several factors such as lack of knowledge, inadequate training, supervision and enforcement of irregular unmanageable in implementing laws and regulations. Human error usually leads to neglect, negligence, reckless conduct and less supervision and control. All these factors lead to poor performance and increased accident rate (Tharaldsen, Mearns, & Knudsen, 2010). Thus, many organisations have difficulty in overcome issues related to occupational safety and health because human nature is likely to engage in behaviours that lead to occupational accidents.

REFERENCES

- Baas, J. R. (2002). An exploratory study of the role of trust in safety climates and overall safety. (Doctoral Dissertation, Alliant International University, 2002).
- Barling, J. Loughlin, C. & Kelloway, K. (2002). Development and Test of a Model Linking Safety-Specific Transformational Leadership and Occupational Safety. *Journal of Applied Psychology* 2002, 87(3), 488–496.
- Brown, R.L., Holmes, H. (1986). The use of a factor-analytic procedure for assessing the validity of an employee safety climate model. *Accident Analysis and Prevention*, 18, 455-470.
- Brown, K.A, Willis, P.G. & Prussia, G.E. (2000). Mental models of safety: do managers and employees see eye to eye? *Journal of Safety Research* 34 (2003) 143 – 156.
- Borman, W.C., Motowidlo, S.J. (1993). Expanding the criterion domain to include elements of contextual performance. In: Schmidt, N. Borman, W.C., Howard, A., Kraut, A., Ilgen, D., Schneider, B., Zedeck, S. (Eds.), *Personnel Selection in Organisations*. Jossey-Bass, San Francisco, pp. 1-98.
- Budworth, N. (1997). “The development and evaluation of a safety climate measure as a diagnostic tool in safety management”, *IOSH Journal*, 1. 19 – 29.
- Burke, M.J. et al., (2002). General Safety Performance: A Test of a Grounded Theoretical Model. *Personnel Psychology*. 2002, 55.
- Burt, C.D.B., Sepie, B. and McFadden, G. (2008), The development of a considerate and responsible safety attitude in work teams, *Safety Science*, 46, 79-91.
- Carder, B. & Ragan, P.W. (2003). A survey-based system for safety measurement and improvement, *Journal of Safety Research*, 34(2). 157 – 165.
- Chiaburu, D.S. & Harrison, D.A. (2008), Do peers make the place? Conceptual synthesis and meta-analysis of co-worker effects on perceptions, attitudes, OCBs and performance, *Journal of Applied Psychology*, 93, 1082-103.

- Cheyne, A., Oliver, A., Tomas, J.M., & Cox, S. (2002). The architecture of employee attitudes to safety in the manufacturing sector, *Personnel Review*, 31,649 – 670.
- Christian, M. S., Bradley, J. C., Wallace, J. C., & Burke, M. J. (2009). Workplace safety: A meta-analysis of the roles of person and situation factors. *Journal of Applied Psychology*, 94, 1103-1127.
- Clarke, S., (1998). Safety culture on the UK Railway Network, *Work and Stress*, 12 (3). 285 - 292.
- Clarke, S. (2006). Safety climate in an automobile manufacturing plant: the effects of work environment, job communication and safety attitudes on accidents and unsafe behaviour, *Personnel Review*, 35(4), 413 – 430.
- Cooper, D. (1995). Measurement of safety climate: a component analysis, Institute of Safety & Health (IOSH) Meeting on 1 Feb. 1995. Retrieved: from <http://www.b-safe.net/articles/bsms1.pdf>.
- Cooper, M.D. & Phillips, R.A. (2004). Exploratory analysis of the safety climate and safety behaviour relationship, *Journal of Safety Research*, 35(5), 497 – 512.
- Cox, S. & Cheyne, A. (2000). Assessing safety culture in offshore environments, *Safety Science*, 34, 111 - 129.
- Cox, S. & Cox, T. (1991). The structure of employee attitudes to safety: a European example, *Work and Stress*, 5, 93 - 106.
- Coyle, I.R., Sleeman, S.D. & Adams, N. (1995). Safety climate, *Journal of Safety Research*, 26(4), 247 – 254.
- Dawson, B. & Trapp, R.G. (2004). Basic & clinical biostatistics, 4th ed., Lange Medical Books/McGraw-Hill, New York.
- Dedobbeleer, N. & Beland, F. (1991). A safety climate measure for construction sites, *Journal of Safety Research*, 22(2), 97 – 103.
- Donald, I., & Young, S. (1996). An attitudinal-based approach to improving safety in organisations, *Leadership & Organisation Development Journal*, 17(4), 13-20.

- Flin, R., Mearns, K., O'Connor, P. & Bryden, R. (2000). Measuring safety climate: identifying the common features, *Safety Science*, 34(1- 3), 177 – 192.
- Glendon, A.I. & Stanton, N.A. (2000). Perspectives on safety culture, *Safety Science*, (34), 193-214.
- Grabowski, Ayyalasomayajula, Merrick, Harrald, and Roberts (2007). Accident precursors and safety nets: leading indicators of tanker operations safety. *Maritime Policy Management*, October 2007, 34(5), 405–425.
- Griffin M.A., & Neal, A. (2000). Perceptions of safety at work: A framework for linking safety climate to safety performance, knowledge, and motivation. *Journal of Occupational Health Psychology*, 5(3), 347-358.
- Goetsch, D.L. (2005). Occupational safety and health for technologists, engineers and managers, 5th ed., Prentice Hall, New Jersey.
- Hair, J.F., Anderson, R.E., Tatham, R.L. & Black, W.C. (1998). Multivariate data analysis, 5th ed., Prentice Hall International, Inc., New Jersey.
- Hale, A.R., Heming, B.H.J., Carthey, J. & Kirwan, B. (1997). Modelling of safety management systems, *Safety Science*, 26(1) ,121 – 140.
- Hassan, A., Nor Azimah, C.A. & Chandrakantan, S. (2005). Reducing workplace injury through effective management practices: some empirical evidence from Malaysian companies, Presented at the 18th Asian Conference on Occupational and Environmental Health on 11 – 13 May 2005 at Wellington, New Zealand.
- Havold, J.I., & Nasset, E. (2008). From safety culture to safety orientation: validation and simplification of a safety orientation scale using a sample of seafarers working for Norwegian ship owners. *Safety Science*, Article in Press, 1 – 22.
- Health and Safety Executive (HSE). (2002). Safety culture: a review of the literature, Retrieved: from http://www.hse.gov.uk/research/hsl_pdf/2002/hsl02-25.pdf.

- Health and Safety Executive (HSE). (2005). A review of safety culture and safety climate literature for the development of the safety culture inspection toolkit, Retrieved: <http://www.hse.gov.uk/RESEARCH/rrpdf/rr367.pdf>.
- Hoffman, D.A., Stretzer, A. (1998). The role of safety climate and communication in accident interpretation: Implications for learning from negative events, *The Academy of Management Journal*, 41(6), .
- Hong Kong Occupational Safety and Health Council. (1998). Survey of Health and Safety Climate in Hong Kong Hotel Industry, Retrieved: http://www.oshc.org.hk/download/research/27/2/e_hotel_industry.doc.
- Hsu, S.H., Lee, C.C., Wu, M.C., & Takano, K. (2007). Exploring cross-cultural differences in safety climate of oil refinery plants in Japan and Taiwan, in Proceedings of the International Conference on Business and Information. Tokyo, Japan, 11-13 July 2007. Retrieved: <http://ibacnet.org/bai2007/proceedings/Papers/2007bai7280.doc>.
- Huang, Y.H., Ho, M., Smith, G.S., Chen, P.Y. (2006). Safety climate and self-reported injury: assessing the mediating role of employee safety control, *Accident Analysis and Prevention*, 38, 425 – 433.
- Johnson, S.E. (2007). The predictive validity of safety climate, *Journal of Safety Research*, 38(5), 511 – 521.
- Kelloway, E.K., Stinson, V., et al. (2004). Eyewitness Testimony in Occupational Accident Investigations: Towards a Research Agenda: Psychology, Law and the Workplace. *Law and Human Behavior*, 28(1).
- Krejcie, R.V., & Morgan, D.W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Khdaif, W.A., Shamsudin, F.M., & Subramaniam, C. (2012). A Proposed Relationship between Management Practices and Safety Performance in the Oil and Gas Industry in Iraq, *World Review of Business Research*, 1(1). 27-45.
- Kho, M.E., Carbone, J.M., Lucas, J. & Cook, D.J. (2005). Safety climate survey: reliability of results from a multicenter ICU survey, *Quality Safety Health Care*, 14, 273 – 278.

- LaMontagne, A.D., Barbeau, E., Youngstrom, R.A., Lewiton, M., Stoddard, A.M., McLellan, D., Wallace, L.M. & Sorensen, G. (2004). Assessing and intervening on OSH programmes: effectiveness evaluation of the Wellworks-2 intervention in 15 manufacturing worksites, *Occupational & Environmental Medicine*, 61, 651 – 660.
- Law, W.K., Chan, A.H.S. & Pun, K.F. (2006). Prioritising the safety management elements: a hierarchical analysis for manufacturing enterprises, *Industrial Management & Data Systems*, 106(6), 778 – 792.
- Lin, J. & Mills, A. (2001). Measuring the occupational health and safety performance of construction companies in Australia, *Facilities*, 19(3), 131 – 138.
- Lin, S.H., Tang, W.J., Miao, J.Y., Wang, Z.M. & Wang, P.X. (2008). Safety climate measurement at workplace in China: a validity and reliability assessment, *Safety Science*, 46(7), 1037 – 1046.
- Lu, C.S., Tsai, C.L. (2008). The effects of safety climate on vessel accidents in the container shipping context. *Accident Analysis and Prevention*. 40 (2008) 594–601
- McDonald's, Daly, and Corrigan, Cromie (2000) Safety management systems and safety culture in aircraft maintenance organisation. *Safety Science* 34 (2000) 151-176.
- Marsh, T.W., Robertson, I.T., Duff, A.R., Phillips, R.A., Cooper, M.D. & Weyman, A. (1995). Improving safety behaviour using goal setting and feedback, *Leadership & Organisation Development Journal*, 16 (1), 5 – 12.
- Mearns K, Flin R, & Whitaker S. (2001). Benchmarking safety climate in hazardous environments: a longitudinal, inter-organizational approach. *Risk Analysis*, 21, 771-86.
- Mullen, J. (2004). Investigating factors that influence individual safety behavior at work. *Journal of Safety Research*, 35, 275-285.
- National Occupational Health and Safety Commission (NOHSC). 2002. Extending the use of OHS positive performance indicators in Australian industry, Retrieved: <http://www.nohsc.gov.au/PDF/Statistics/ReportExtendingtheuseofPPIs.pdf#search='safety%20performance%20measurement%20tools'>

- Neal, A., Griffin, M.A. & Hart, P.M. (2000). The impact of organisational climate on safety climate and individual behavior, *Safety Science*, 4, 99 – 109.
- Neal, A., Griffin, M.A. (2002). Safety climate and safety behaviour, *Australian Journal of Management*, 27, Special Issue.
- Neal, A., Griffin, M. A. (2006). A study of the lagged relationships among safety climate, Safety motivation, safety behaviour, and accidents at the individual and group levels. *Journal of Applied Psychology*, 91(4), 946-953.
- Nunnally, J.C. & Bernstein, I.H. (1994). *Psychometric theory* (3rd Edition). New York: McGraw Hill Inc.
- Page-Bucci, H. (2003). *The value of Likert scales in measuring attitudes of online learners*, Retrieved: <http://www.hkadesigns.co.uk/websites/msc/remel/likert.htm>.
- Petersen, D. (2000). “Safety management (2000): our strengths & weaknesses”, *American Society of Safety Engineers: Professional Safety*, 16 – 19.
- Prussia, G. E., Brown, K. A., & Willis, G. P. (2003). Mental models of safety: do managers and employees see eye to eye? *Journal of Safety Research*, 34, 143– 156.
- Rozhan, O., Rohayu, A.G. & Rasidah, A. (2001). Great expectations: CEOs’ perception of the performance gap of the HRM function in the Malaysian manufacturing sector, *Personnel Review*, 30(1), 61 – 80.
- Rundmo, T. (2000). Risk perception by offshore oil personnel during bad weather conditions. *Risk Analysis*, 18(1), 1998.
- Salminen, S. & Seppala, A. (2005). Safety climate in Finnish-and Swedish speaking companies. *International Journal of Occupational Safety and Ergonomics*, 11(4), 389 – 397.
- Sekaran, U. & Bougie, R. (2009). *Research methods for business: a skill-building approach* (5th ed.). Haddington: John Wiley & Son

- Shannon, H.S. & Norman, G.R. (2008). Deriving the factor structure of safety climate scales, *Safety Science*, Article in Press, 1 – 3.
- Social Security Organisation (SOCSO) (2016). Industrial statistic based on industrial sectors, Retrieved: <http://www.perkeso.gov.my>.
- Siu, L., Phillips, D.R., & Leung, T. (2004). Safety climate and safety performance among construction workers in Hong Kong: The role of psychological strains as mediators. *Accident Analysis & Prevention*, 36(3), 359-366.
- Tabachnick, B.G. & Fidell, L.S. (2007). Using multivariate statistics. Pearson Education Inc., Boston.
- Tharaldsen, J., Mearns, K., & Knudsen, K. (2010). Perspectives on safety: The impact of group membership, work factors and trust on safety performance in UK and Norwegian drilling company employees. *Safety Science*. 48, 1062-1072.
- Tomas, J.M., Melia, J.L. & Oliver, A.M. (1999). A cross validation of a structural equation model of accidents: organisational and psychological variables as predictors of work safety, *Work and Stress*, 13(1), 49 – 58.
- Thompson, R. C., Hilton, T. F., & Witt, L. A. (1998). Where the safety rubber meets the shop floor: A confirmatory model of management influence on workplace safety. *Journal of Safety Research*, 29(1), 15-24.
- Vassie, L.H. & Lucas, W.R. (2001). An assessment of health and safety management within working groups in the UK manufacturing sector, *Journal of Safety Research*, 32(4) ,479 – 490.
- Vinodkumar, M. N., & Bhasi, M. (2009). Safety Climate factors and its relationship with accidents and personal attributes in the chemical industry. *Safety Science*, 47(5),659-667.
- Vinodkumar, M.N., Bhasi, M. (2010). Safety management practices and safety behaviour: Assessing the mediating role of safety knowledge and motivation. *Accident Analysis and Prevention*, 42, 2082-2093.

- Von Thaden, T.L., Wiegmann, D.A., Mitchell, A.A., Sharma, G. & Zhang, H. (2003). "Safety culture in a regional airline: results from a commercial aviation safety survey", Paper presented at the 12th International Symposium on Aviation Psychology, Dayton, OH.
- Williamson, A.M., Feyer, A.M., Cairns, D. & Biancotti, D. (1997). The development of a measure of safety climate: the role of safety perceptions and attitudes, *Safety Science*, 25(1), 15 –27.
- Wu, T., Chen, C., & Li, C. (2008). A correlation among safety leadership, safety climate and safety performance. *Journal of Loss Prevention in the Process Industries*, 21(3), 307-318.
- Yule, S., Flin, R., Murdy, A. (2007). The role of management and safety climate in preventing risk-taking at work, *International Journal of Risk Assessment and Management*, 7(2), 137 – 151.
- Zhou, Q., Fang, D., Wang, X. (2008). A method to identify strategies for the improvement of human safety behavior by considering safety climate and personal experience. *Safety Science*, 46(10), 1406-1419.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2010). Business research methods (8th ed.). Mason, HO: Cengage Learning.
- Zohar, D. (1980). "Safety climate in industrial organisations: theoretical and applied implications", *Journal of Applied Psychology*, 65(1), 96 – 102.
- Zohar, D. (2008). Safety climate and beyond: a multi-level multi-climate framework, *Safety Science*, 46(3), 376 – 387.

APPENDIX A



UNIVERSITY UTARA MALAYSIA

KUALA LUMPUR CAMPUS

SCHOOL OF BUSINESS

**PROGRAM : SARJANA SAINS (KESELAMATAN DAN
PENGURUSAN KESIHATAN PEKERJAAN)**

**TAJUK : PENGARUH IKLIM KESELAMATAN KE ATAS
PRESTASI KESELAMATAN DI KALANGAN
PEKERJA DI HOSPITALSERDANG.**

PENSYARAH : DR MUNAUWAR BIN MUSTAFA

NAMA PELAJAR : MUTHURAMAN A/L SELLATHURAI PATHAR

NOMBOR MATRIK: 816630

**SOAL SELIDIK KAJIAN PENGARUH IKLIM KESELAMATAN KE ATAS
PRESTASI KESELAMATAN DI KALANGAN PEKERJA DI HOSPITAL
SERDANG.**

Soal Selidik mengandungi sembilan (9) bahagian:

Profil Responden dan Surat Persetujuan

Bahagian A: Demografi Responden

Bahagian B: Amalan Keselamatan Pengurusan

Bahagian C: Amalan Keselamatan Pihak Penyelia

Bahagian D: Sikap Keselamatan

Bahagian E: Latihan Keselamatan

Bahagian F: Keselamatan Kerja

Bahagian G: Amalan Keselamatan Rakan Sekerja

Bahagian H: Pematuhan Keselamatan

Bahagian I: Penyertaan Keselamatan

SURAT KEBENARAN

Soal selidik ini mengandungi Sembilan bahagian dan objektif kajian ini mengenalpasti pengaruh kepada iklim keselamatan dan prestasi keselamatan dalam Keselamatan dan Kesihatan Pekerjaan di hospital.

Saya, dengan ini memberi persetujuan untuk mengambil bahagian dalam soal selidik ini.

Saya faham maklumat yang diberikan akan rahsia pada setiap masa dan hanya menggunakan tujuan penyelidikan sahaja.

Tinjauan ini meminta pendapat anda mengenai isu-isu iklim keselamatan di hospital anda dan akan mengambil masa kira-kira 10 hingga 15 minit untuk disiapkan.

Tandatangan Responden: _____

Nombor Kad Pengenalan : _____

Tarikh : _____

**KAJIANPENGARUH IKLIM KESELAMATAN KE ATAS PRESTASI
KESELAMATAN DI KALANGAN PEKERJA DI HOSPITAL SERDANG**

Bahagian A: Demografi Responden

Arahan: Sila tandakan (X) pada ruang yang berkaitan.

- 1) Umur 20-30 tahun 41-50 tahun
 31-40 tahun > 50 tahun
- 2) Jantina Lelaki Perempuan
- 3) Warganegara Warga Malaysia BukanWargaMalaysia
- 4) Jawatan Pekerja Am PegawaiKeselamatan/
 Kontraktor Penyelia
 Eksekutif
- 5) Hospital

Bahagian B: Amalan Keselamatan Pihak Pengurusan

Arahan: Sila bulatkan jawapan anda pada skala yang bersesuaian..

1	2	3	4	5
Sangat Tidak Setuju	Tidak Setuju	Tidak Pasti	Setuju	Sangat Setuju

1. Hospital saya pantas memberikan respon kepada masalahkeselamatan	1	2	3	4	5
2. Hospital saya memberi maklumat tentang keselamatan	1	2	3	4	5
3. Hospital saya mengadakan mesyuarat tentang keselamatan pekerja secara berkala	1	2	3	4	5
4. Hospital saya akan menyiasat masalah keselamatan dengan segera	1	2	3	4	5
5. Hospital saya menjalankan pemeriksaan keselamatan dengan kerap	1	2	3	4	5
6. Hospital saya menyediakan peralatan keselamatan yang cukup	1	2	3	4	5
7. Hospital saya sentiasa memaklumkan tentang bahaya kepada pekerja-pekerja	1	2	3	4	5

8. Hospital saya memberi penekanan kepada keadaan kerja yang selamat	1	2	3	4	5
9. Hospital saya menyediakan program latihan keselamatan yang mencukupi	1	2	3	4	5
10. Hospital saya menyediakan peralatan keselamatan yang baik	1	2	3	4	5
11. Hospital saya melabelkan tanda amaran pada bahan kimia yang berbahaya.	1	2	3	4	5
12. Hospital saya memberi ganjaran kepada pekerja yang berkerja dengan selamat	1	2	3	4	5

Bahagian C: Amalan Keselamatan Pihak Penyelia

13. Penyelia saya bertindak terhadap cadangan keselamatan oleh pekerja	1	2	3	4	5
14. Penyelia saya menggalakkan tingkah laku yang selamat	1	2	3	4	5
15. Penyelia saya mengambil berat tentang keselamatan pekerja	1	2	3	4	5
16. Penyelia saya memuji tingkah laku kerja yang selamat	1	2	3	4	5
17. Penyelia saya membincangkan isu-isu keselamatan dengan orang lain	1	2	3	4	5
18. Penyelia saya memastikan pekerja dimaklumkan mengenai peraturan keselamatan	1	2	3	4	5
19. Penyelia saya melibatkan pekerja dalam menetapkan matlamat keselamatan	1	2	3	4	5
20. Penyelia saya menguatkuasakan peraturan keselamatan	1	2	3	4	5
21. Penyelia saya sering menyebut bahawa keselamatan adalah sangat penting dengan kecekapan	1	2	3	4	5

Bahagian D: Sikap Keselamatan

22. Penggunaan peralatan keselamatan tidak boleh mengurangkan kecederaan dan kemalangan	1	2	3	4	5
23. Prosedur operasi yang selamat tidak boleh mengurangkan kemalangan	1	2	3	4	5
24. Saya melanggar peraturan keselamatan semasa di bawah tekanan kerja	1	2	3	4	5
25. Saya mengabaikan peraturan keselamatan untuk menyelesaikan kerja yang dilakukan	1	2	3	4	5
26. Kemalangan tidak dapat dielakkan ataupun keselamatan pekerja tidak dapat dilindungi	1	2	3	4	5
27. Saya akan mengabaikan prosedur berkerja yang selama tuntut kemudahan saya	1	2	3	4	5
28. Saya menilaikan kemalangan sebagai nasib malang	1	2	3	4	5
29. Saya tidak suka menerima cadangan keselamatan daripada orang lain	1	2	3	4	5

Part E: Latihan Keselamatan

30. Program-program latihan keselamatan membantu mengelakkan kemalangan di hospital saya	1	2	3	4	5
31. Program-program latihan keselamatan di hospital saya adalah berguna	1	2	3	4	5
32. Program-program latihan keselamatan di hospital saya adalah berguna	1	2	3	4	5
33. Program-program latihan keselamatan di hospital saya berkaitan dengan kerja saya	1	2	3	4	5
34. Program-program latihan keselamatan di hospital saya adalah jelas	1	2	3	4	5
35. Program-program latihan keselamatan di hospital saya adalah baik	1	2	3	4	5
36. Program-program latihan keselamatan di hospital saya sangat berkesan	1	2	3	4	5

Bahagian F: Keselamatan Tugas

37. Kerja di unit/tempat kerja tidak selamat	1	2	3	4	5
38. Kerja di unit/tempat kerja adalah berisiko	1	2	3	4	5
39. Berkerja di unit/tempat kerja seseorang boleh tercedera dengan mudah	1	2	3	4	5
40. Kerja di unit/tempat kerja tidak sihat	1	2	3	4	5
41. Kerja di unit/tempat kerja adalah berbahaya	1	2	3	4	5
42. Kerja di unit/tempat kerja menakutkan	1	2	3	4	5

Bahagian G: Amalan Keselamatan Rakan Sekerja

43. Rakan sekerja saya mengalakkan orang lain berada dalam keadaan selamat	1	2	3	4	5
44. Rakan sekerja saya mengambil berat tentang keselamatan kerja	1	2	3	4	5
45. Rakan sekerja saya mengambil berat tentang keselamatan orang lain	1	2	3	4	5
46. Rakan sekerja saya ikut peraturan keselamatan	1	2	3	4	5
47. Rakan sekerja saya memastikan Kawasan kerja selamat	1	2	3	4	5

Bahagian H: Pematuhan Keselamatan

48. Saya sentiasa ada kesedaran keselamatan di tempat kerja	1	2	3	4	5
49. Saya mematuhi kepada peraturan keselamatan dan prosedur operasi standard	1	2	3	4	5
50. Saya tidak mengabaikan keselamatan, walaupun dalam keadaan tergesa-gesa	1	2	3	4	5
51. Saya memakai peralatan perlindungan peribadi semasa bekerja	1	2	3	4	5
52. Saya yakin dengan kebolehan saya untuk bekerja dengan selamat	1	2	3	4	5

Bahagian I: Penyertaan Keselamatan

53. Saya aktif melibatkan diri dalam menetapkan matlamat keselamatan	1	2	3	4	5
54. Saya secara aktif mempromosi cadangan-cadangan penambahbaikan keselamatan	1	2	3	4	5
55. Saya secara aktif mengambil bahagian dalam mesyuarat keselamatan	1	2	3	4	5
56. Saya secara aktif mengambil bahagian atau membantu rakan sekerja dengan isu yang berkaitan dengan keselamatan semasa taklimat keselamatan	1	2	3	4	5
57. Saya secara aktif mengambil bahagian dalam membuat keputusan keselamatan dengan penyelia saya	1	2	3	4	5



Terima kasih untuk meluangkan masa anda.

APPENDIX B



UNIVERSITY UTARA MALAYSIA

KUALA LUMPUR CAMPUS

SCHOOL OF BUSINESS

PROGRAM : MASTER OF SCIENCE
(OCCUPATIONAL SAFETY AND HEALTH
MANAGEMENT)

TITLE : THE INFLUENCE OF SAFETY CLIMATE ON
SAFETY PERFORMANCE IN SERDANG HOSPITAL.

LECTURER : DR MUNAUWAR BIN MUSTAFA

STUDENT NAME : MUTHURAMAN A/L SELLATHURAI PATHAR

MATRIC NUMBER : 816630

**QUESTIONNAIRE ON THE INFLUENCE OF SAFETY CLIMATE ON
SAFETY PERFORMANCE IN SERDANG HOSPITAL**

The Questionnaire contains nine (9) parts:

- Respondent Profile and Consent Letter**
- Part A: Demography of the Respondent**
- Part B: Management Safety Practices**
- Part C: Supervisory Safety Practices**
- Part D: Safety Attitude**
- Part E: Safety Training**
- Part F: Job Safety**
- Part G: Co- Workers Safety Practice**
- Part H: Safety Compliance**
- Part I: Safety Participation**

LETTER OF CONSENT

This Questionnaire contains nine parts and the objective of this study of the influence on safety climate and safety performance in Occupational Safety and Health (OSH) in hospital.

I, hereby give consent to participate in this questionnaire.

I understand the information given will be confidential at all time and it only be use research purpose only.

This survey asks for your opinions about safety culture issues in your hospital and will take about 10 to 15 minutes to complete.

Respondent Signature: _____

IC No. : _____

Date : _____

RESEARCH ON THE INFLUENCE OF SAFETY CLIMATE ON SAFETY PERFORMANCE AMONG WORKERS IN HOSPITAL SERDANG

Part A: Demography of the Respondent

Instructions: Please tick (X) on the related column.

- 1) Age 20-30 years old 41-50 years old
 31-40 years old > 50 years old
- 2) Gender Male Female
- 3) Nationality Malaysian Non-Malaysian
- 4) Position Doctors Safety Officer/Supervisor
 Nurses Others
- 5) Department/Unit

Part B: Management Safety Practices

Instructions: Please rate how much you personally agree or disagree with these statements. Please circle the correct answer.

1	2	3	4	5
Strongly disagree	Disagree	Unsure	Agree	Strongly agree

1. My hospital responds quickly to safety concerns	1	2	3	4	5
2. My hospital provides safety information	1	2	3	4	5
3. My hospital has a regular job safety meeting	1	2	3	4	5
4. My hospital investigates safety problems quickly	1	2	3	4	5
5. My hospital conducts frequent safety inspections	1	2	3	4	5

6. My hospital provides enough safety equipment	1	2	3	4	5
7. My hospital keeps workers informed of the hazards	1	2	3	4	5
8. My hospital emphasizes safe working conditions	1	2	3	4	5
9. My hospital provides enough safety training programmes	1	2	3	4	5
10. My hospital provides good safety equipment	1	2	3	4	5
11. My hospital label warning signs for hazardous substances	1	2	3	4	5
12. My hospital rewards safe workers	1	2	3	4	5

Part C: Supervisory Safety Practices

13. My supervisors act on safety suggestions by the workers	1	2	3	4	5
14. My supervisors encourage safe behaviours	1	2	3	4	5
15. My supervisors care about the worker safety	1	2	3	4	5
16. My supervisors praise safe work behaviour	1	2	3	4	5
17. My supervisors discuss safety issues with others	1	2	3	4	5
18. My supervisors keep the workers informed of safety rules	1	2	3	4	5
19. My supervisors involve the workers in setting safety goals	1	2	3	4	5
20. My supervisors enforce safety rules	1	2	3	4	5
21. My supervisors frequently mention safety is as important as efficiency	1	2	3	4	5

Part D: Safety Attitude

22. The use of safety equipment cannot reduce injuries and accidents	1	2	3	4	5
23. Safe operating procedures cannot reduce accidents	1	2	3	4	5
24. I break safety rules when under job pressure	1	2	3	4	5
25. I ignore safety regulations to get the job done	1	2	3	4	5
26. Accidents cannot be avoided nor workers protected in advance	1	2	3	4	5
27. I will ignore safe working procedures for convenience	1	2	3	4	5
28. I put accidents down to bad luck	1	2	3	4	5
29. I don't like to accept safety suggestions from others	1	2	3	4	5

Part E: Safety Training

30. The safety training programs in my hospital help prevent accidents	1	2	3	4	5
31. The safety training programs in my hospital are useful	1	2	3	4	5
32. The safety training programs in my hospital are worthwhile	1	2	3	4	5
33. The safety training programs in my hospital apply to my job	1	2	3	4	5
34. The safety training programs in my hospital are clear	1	2	3	4	5
35. The safety training programs in my hospital are good	1	2	3	4	5
36. The safety training programs in my hospital do the work	1	2	3	4	5

Part F: Job Safety

37. Work area/unit in this hospital is unsafe	1	2	3	4	5
38. Work area/unit in this hospital is risky	1	2	3	4	5
39. Working area/unit in this hospital can easily get hurt	1	2	3	4	5
40. Work area/unit in this hospital is unhealthy	1	2	3	4	5
41. Work area/unit in this hospital is dangerous	1	2	3	4	5
42. Work area/unit in this hospital is scary	1	2	3	4	5

Part G: Co- Workers Safety Practice

43. My co-workers encourage others to be safe	1	2	3	4	5
44. My co-workers care about work safety	1	2	3	4	5
45. My co-workers care about others' safety	1	2	3	4	5
46. My co-workers follow safety rules	1	2	3	4	5
47. My co-workers keep the work area safe	1	2	3	4	5

Part H: Safety Compliance

48. I maintain safety awareness at work	1	2	3	4	5
49. I comply with safety rules and standard operational procedure	1	2	3	4	5
50. I do not neglect safety, even when in a rush.	1	2	3	4	5
51. I wear personal protective equipment at work	1	2	3	4	5
52. I am confident in my ability to work safely	1	2	3	4	5

Part I: Safety Participation

53. I actively participate in setting safety goals	1	2	3	4	5
54. I actively promote safety improvement suggestions	1	2	3	4	5
55. I actively participate in safety meeting	1	2	3	4	5
56. I actively participate or helping coworkers with safety related issues during safety briefing	1	2	3	4	5
57. I actively participate in safety decision making with my supervisor.	1	2	3	4	5



Thank you for your time.

