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THE INFLUENCE OF SAFETY CLIMATE ON SAFETY PERFORMANCE AMONG WORKERS OF A  
FOOD EMULSIFIERS COMPANY IN MALAYSIA



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

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## ABSTRAK

Tesis ini adalah bertujuan untuk mengkaji hubungan antara iklim keselamatan dan prestasi keselamatan di Danisco Malaysia Sdn. Bhd. Secara umum, enam dimensi iklim keselamatan dikaji dalam kajian ini iaitu amalan keselamatan pengurusan, pendirian keselamatan, latihan keselamatan, amalan keselamatan penyeliaan, penglibatan rakan sekerja, dan keselamatan pekerjaan. Untuk menentukan kesahihan objektif kajian, 146 set soal selidik telah diedarkan kepada kakitangan di bahagian operasi Danisco Malaysia. Data-data kuantitatif yang diperolehi dianalisis menggunakan perisian SPSS. Ujian korelasi Pearson mendapati bahawa wujud hubungan positif yang signifikan untuk lima daripada enam dimensi iklim keselamatan terhadap prestasi keselamatan. Di antaranya ialah amalan keselamatan pengurusan, latihan keselamatan, amalan keselamatan penyeliaan, penglibatan rakan sekerja, dan keselamatan pekerjaan. Walau bagaimanapun, pendirian keselamatan didapati mempunyai hubungan yang tidak signifikan terhadap prestasi keselamatan. Ujian regresi berganda menunjukkan bahawa dimensi iklim keselamatan mempengaruhi prestasi keselamatan secara signifikan. Akhirnya, implikasi kajian dibincangkan untuk memberi cadangan dan garis panduan untuk penyelidikan masa depan.

Kata kunci: Iklim Keselamatan, Prestasi Keselamatan, DANISCO Malaysia Sdn. Bhd.

## ABSTRACT

This study aimed to determine the relationship between safety climate and safety performance in Danisco Malaysia Sdn. Bhd. Six dimensions of safety climate were studied in this research namely management safety practices, safety attitude, safety training, supervisory safety practices, the involvement of co-workers, and job safety. In order to achieve the objectives of the study, 146 sets of questionnaires were distributed to the staff in the operation department of Danisco Malaysia. Quantitative data were analyzed using SPSS software. Pearson correlation test found a significant positive relationship for five out of six dimensions of safety climate against with safety performance. The five significant dimensions are management safety practices, safety training, supervisory safety practices, the involvement of co-workers, and job safety. However, safety attitude was found to have an insignificant relationship with safety performance. Multiple regression tests revealed that safety climate dimensions significantly influence safety performance. Finally, the implications of the study are discussed to provide recommendations and guidelines for future researches.

Key words: Safety Climate, Safety Performance, and Danisco Malaysia Sdn Bhd.

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## CHAPTER 1 INTRODUCTION

### 1.1 Background of Study

In various organizations and industries, safety is a major concern as it is the substantial source of direct and indirect cost. Organizational safety is simply defined as freedom from any form of accidents due occupational activities (Katz-Navon, Naveh, & Stern, 2007). Safety performance of such organizations usually accessed by the conventional factors such as accidents and injury rates monthly and in some cases annual manner. These measurements are unreliable, hence causing hoax at the operations of the organization (Ritchie, Coats, Disatell, & Cook, 2004). Despite the fact that the lower rate of accidents at the workplace than that of road accidents, this issue should not be taken for granted. The manpower in an organization is the resource and driving engine in ensuring the country's capital growth.

Usually, accidents at workplace are due to several factors like lack of knowledge and skills on the assigned tasks, lack of training, poor occupational safety policy implementation and poor management commitment. These factors contribute towards the increase of accidents rate, thus reducing the organizational safety performances (Tharaldsen, Mearns, & Knudsen, 2010). Therefore, some organizations took initiative in adding several performance indicators to access the safety performances without the need for accident analysis. The stakes are high, and it is critical that safety performance measurements reflect the probability of accidents in the near future (Yule, Flin, & Murdy,

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## REFERENCES

Abdul Wahab, S. R., Mad Shah, I., & Idrus, D. (2010). The Role of Transformational Leader to Safety Performance in Malaysia ' s Automotive Industry, *2009*, 195–199.

Abdullah, N. A. C., Spickett, J. T., Rumcke, K. B., & Dhaliwal, S. S. (2009). Validity and reliability of the safety climate measurement in Malaysia. *International Review of Business Research Papers*, 5(3), 111-141.

Arezes, P., & Miguel, A. (2003). The role safety culture in safety performance. *Measuring Business Excellence*, 20–28.

Auni Fatin Nadia, Chiek Desa Nurul Fadly, H., Siti Norhafizan, Hibadullah Nursyazwani, M. F., & Farah Izzaida, M. Z. (2013). Occupational Safety and Health Administration (OSHA) Practices and OSHA Performance in Malaysian Automotive Industry. *Journal of Studies in Social Sciences*.

Bartunek, J. M., Bartunek, J. M., Seo, M.-G., & Seo, M.-G. (2002). Qualitative Research Can Add New Meaning to Quantitative Research. *Journal of Organizational Behavior*, 23(2), 237–242. doi:10.1002/job.

Bosak, J., Coetsee, W. J., & Cullinane, S. J. (2013). Safety climate dimensions as predictors of risk behavior. *Accident Analysis and Prevention*, 55, 256–264. doi:10.1016/j.aap.2013.02.022

Brown, R. L., and Harold Holmes. "The use of a factor-analytic procedure for assessing the validity of an employee safety climate model." *Accident Analysis & Prevention* 18.6 (1986): 455-470.

Brondino, M., Silva, S. A., & Pasini, M. (2012). A multilevel approach to organizational and group safety climate and safety performance: Co-workers as the missing link. *Safety Science*, 50(9), 1847-1856.

Basha, S. A., & Maiti, J. (2013). Relationships of demographic factors, job risk perception and work injury in a steel plant in India. *Safety Science*, 51(1), 374-381.

Burke, M. J., Salvador, R. O., Smith-Crowe, K., Chan-Serafin, S., Smith, A., & Sonesh, S. (2011). The dread factor: how hazards and safety training influence learning and performance. *Journal of Applied Psychology*, 96(1), 46.

Casey, T. W., & Krauss, A. D. (2013). The role of effective error management practices in increasing miners' safety performance. *Safety Science*, 60, 131-141.

Cheng, E. W., Ryan, N., & Kelly, S. (2012). Exploring the perceived influence of Management Safety Practices on project performance in the construction industry. *Safety Science*, 50(2), 363-369.

Clarke, S. (n.d.). The relationship between safety climate and safety performance: A meta-analytic review. *Journal of Occupational Health Psychology*, 26(5), 315–327.

Clarke, S., & Ward, K. (2006). The role of leader influence tactics and safety climate in engaging employees' safety participation. *Risk Analysis*, 26(5), 1175-1185.

Cooper, D. (1995). Measurement of Safety Climate : A Component The core features of Safety Climate. *Institute of Occupational Safety & Health, 1*(317).

Díaz, R. I., & Cabrera, D. D. (1997). Safety climate and attitude as evaluation measures of organizational safety. *Accident Analysis & Prevention, 29*(5), 643-650.

Dollard, M. F., & Bakker, a B. (2010). Psychosocial safety climate as a precursor to conducive work environments, psychological health problems, and employee engagement. *Journal of Occupational and Organizational Psychology, 83*(3), 579–599. doi:10.1348/096317909x470690

Dov, Z. (2008). Safety climate and beyond: A multi-level multi-climate framework. *Safety Science, 46*(3), 376–387. doi:10.1016/j.ssci.2007.03.006

Evtushenko, Olga, and Igor Klepikov. "Exploration of occupational injuries in the food industry of Ukraine." *Ukrainian Journal of food science 1*, Iss. 1 (2013): 123-129.

Glazer, S., & Laurel, A. R. (2002). Conceptual Framework for Studying Safety Climate and Culture of commercial airlines, 204–210.

Griffiths, D.K. (1985). Safety injuries of management. *Ergonomics, 28*, 61-67.

Health and Safety Executives. (2001). *A Guide To Measuring Health & Safety*. Sudbury, Suffolk: HSE Books.

Hee, O. C., & Ping, L. L. (2014). Organizational Culture and Safety Performance in the Manufacturing Companies in Malaysia : A Conceptual Analysis, *4*(1), 99–108. doi:10.6007/IJARBSS/v4-i1/516

Herrera, I. A. (2012). *Proactive safety performance indicators: Resilience engineering perspective on safety management*. Norwegian University of Science and Technology.

Hussain, N. (2010). *The Critical Success Factor in Implementation of Occupational Safety and Health*. Universiti Utara Malaysia.

Hofmann, David A., and Adam Stetzer. "A cross-level investigation of factors influencing unsafe behaviors and accidents." *Personnel Psychology* 49.2 (1996): 307-339.

[http://www.dsdl.gov.my/OA/Food\\_Processing\\_JD129960.pdf](http://www.dsdl.gov.my/OA/Food_Processing_JD129960.pdf)

Katz-Navon, T., Naveh, E., & Stern, Z. (2007). Safety self-efficacy and safety performance: potential antecedents and the moderation effect of standardization. *International Journal of Health Care Quality Assurance*, 20(7), 572–584.  
doi:10.1108/09526860710822716

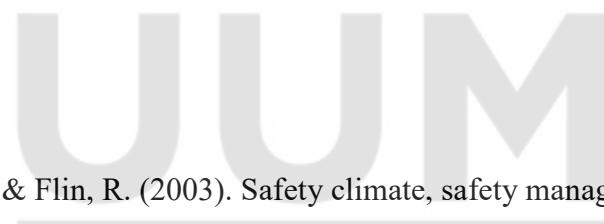
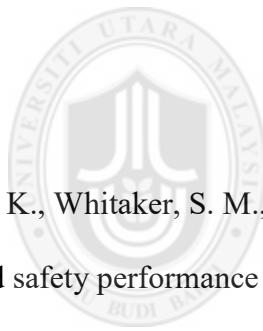
Kapp, E. A. (2012). The influence of supervisor leadership practices and perceived group safety climate on employee safety performance. *Safety science*, 50(4), 1119-1124. Khandan, M. (2012). Ergonomic Behavioral and Workers ' Safety Perception in a Khuzestan Petrochemical Company. *Iran Rehabilitation Journal*, 10(February), 26–30.

Khandan, M., Maghsoudipour, M., Vosoughi, S., & Kavousi, A. (2013). Safety Climate and Prediction of Ergonomic Behavior. *International Journal of Occupational Safety and Ergonomics*, 19(4), 523–530.

Law, R., Dollard, M. F., Tuckey, M. R., & Dormann, C. (2011). Psychosocial safety climate as a lead indicator of workplace bullying and harassment, job resources, psychological health and employee engagement. *Accident Analysis and Prevention*, 43(5), 1782–1793. doi:10.1016/j.aap.2011.04.010

Lee, T., & Harrison, K. (2000). Assessing safety culture in nuclear power stations. *Safety Science*, 34(1-3), 61–97.

Lu, Chin-Shan, and Chaur-Luh Tsai. "The effects of safety climate on vessel accidents in the container shipping context." *Accident Analysis & Prevention* 40.2 (2008): 594-601.



Mearns, K., Whitaker, S. M., & Flin, R. (2003). Safety climate, safety management practice and safety performance in offshore environments. *Safety science*, 41(8), 641-680.

Mullen, Jane. "Investigating factors that influence individual safety behavior at work." *Journal of Safety Research* 35.3 (2004): 275-285.

National Healthcare System. (2010). *An Introduction to Safety Climate*. Scotland.

Neal, A., & Griffin, M. A. (2002). Safety Climate and Safety Behaviour. *Australian Journal of Management*, 27(1 Suppl), 67–75. doi:10.1177/031289620202701S08

Neal, a., Griffin, M. a., & Hart, P. M. (2000). The impact of organizational climate on safety climate and individual behavior. *Safety Science*, 34(1-3), 99–109. doi:10.1016/S0925-7535(00)00008-4

Nor Hidayah, A. R., & Siti Fatimah, B. (2013). Psychosocial Safety Climate in Organization : An Overview of Theoretical and Empirical Development. *Journal of Science and Development Sciences*, 4(9), 407–411.

O'connor, T., Loomis, D., Runyan, C., dal Santo, J. A., & Schulman, M. (2005). Adequacy of health and safety training among young Latino construction workers. *Journal of Occupational and Environmental Medicine*, 47(3), 272-277.

Ramsey, J. G., & Wiegand, D. (2011). *Ergonomic and Safety Climate Evaluation at a Brewery-Colorado*.

Reason, J. (1997). *Managing risks of organizational accidents*. Hampshire, UK: Ashgate Publishing Limited.

Rundmo, T. (1995). Perceived risk, safety status, and job stress among injured and non-injured employees on offshore petroleum installations. *Journal of Safety Research*, 26, 87-97.

Sawacha, E., Naoum, S., & Fong, D. (1999). Factors affecting safety performance on construction sites. *International Journal of Project Management*, 17(5), 309–315. doi:10.1016/S0263-7863(98)00042-8

Shaheen, S., Bashir, S., Shahid, S. A., Yasin, G., Tariq, M. N., & Qidwai, S. A. (2014). The impact of safety climate on safety performance : Evidence from textile dyeing industries of Pakistan. *International Journal of Chemical and Biochemical Series*, 6, 50–55.

Siu, O. L., Phillips, D. R., & Leung, T. W. (2004). Safety climate and safety performance among construction workers in Hong Kong: The role of psychological strains as mediators. *Accident Analysis and Prevention*, 36(3), 359–366. doi:10.1016/S0001-4575(03)00016-2

Snyder, L. A., Krauss, A. D., Chen, P. Y., Finlinson, S., & Huang, Y.-H. (2011). Safety performance: The mediating role of safety control. *Work (Reading, Mass.)*, 40(1), 99–111. doi:10.3233/WOR-2011-1210

Tharaldsen, J., Mearns, K., & Knudsen, K. (2010). Perspectives on Safety: The impact of group membership, work factors and trust on safety performance in the UK and Norwegian drilling company employees. *Safety Science*, 48, 1062–1072.

Veley, C., Ritchie, N., Coats, E. A., Disatell, J., & Cook, P. (2004). SPE 86741 A New Method of Measuring Safety Performance Will Soon Affect the Whole Industry.

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. doi:10.1016/j.ssci.2008.09.004

Vinodkumar, M. N., & Bhasi, M. (2010). Safety management practices and safety behavior: Assessing the mediating role of safety knowledge and motivation. *Accident Analysis & Prevention*, 42(6), 2082-2093.

Vredenburgh, Alison G. "Organizational safety: which management practices are most effective in reducing employee injury rates?." *Journal of Safety Research* 33.2 (2002): 259-276.

Weigmann, D. A., Zhang, H., & von Thaden, T. L. (1997). *Defining and assessing safety culture in high-reliability systems: An annotated bibliography*. Savoy, Illinois.

Wills, A., Biggs, H., & Watson, B. (2005). Analysis of a safety climate measure for occupational vehicle drivers and implications for safer workplaces. *Australian Journal of ...*, 11, 8–21. Retrieved from <http://eprints.qut.edu.au/2917/>

Wu, T. C., Chen, C. H., & Li, C. C. (2008). A correlation among safety leadership, safety climate, and safety performance. *Journal of Loss Prevention in the Process Industries*, 21(3), 307–318. doi:10.1016/j.jlp.2007.11.001

Wu, T.-C. (2001). *The correlational study between safety climate and safety performance in four categories of manufacturing industries in the Central Taiwan*. The National Changhua University of Education.

Yule, S. (2008). *Safety culture and safety climate : A review of the literature file*. Industrial Psychology Research Centre.

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. doi:10.1504/IJRAM.2007.011727

Zohar, D., & Luria, G. (2003). The use of supervisory practices as leverage to improve safety behavior: A cross-level intervention model. *Journal of Safety Research*, 34(5), 567–577. doi:10.1016/j.jsr.2003.05.006

**RESEARCH ON THE INFLUENCE OF SAFETY CLIMATE ON SAFETY  
PERFORMANCE IN FOOD EMULSIFIERS IN PENANG**

**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  General Worker  Safety Officer/  
 Contractor Supervisor  
 Executive

5) Company

**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 company responds quickly to safety concerns	1	2	3	4	5
2. My company provides safety information	1	2	3	4	5
3. My company has a regular job safety meeting	1	2	3	4	5
4. My company investigates safety problems quickly	1	2	3	4	5
5. My company conducts frequent safety inspections	1	2	3	4	5
6. My company provides enough safety equipment's	1	2	3	4	5
7. My company keeps workers informed of the hazards	1	2	3	4	5
8. My company emphasizes safe working conditions	1	2	3	4	5
9. My company provides enough safety training programs	1	2	3	4	5

10. My company provides good safety equipment's	1	2	3	4	5
11. My company label warning signs for hazardous substances	1	2	3	4	5
12. My company 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 company help prevent accidents	1	2	3	4	5
31. The safety training programs in my company are useful	1	2	3	4	5
32. The safety training programs in my company are worthwhile	1	2	3	4	5
33. The safety training programs in my company apply to my job	1	2	3	4	5
34. The safety training programs in my company are clear	1	2	3	4	5
35. The safety training programs in my company are good	1	2	3	4	5
36. The safety training programs in my company do the work	1	2	3	4	5

**Part F: Job Safety**

37. Work on site is unsafe	1	2	3	4	5
38. Work on site is risky	1	2	3	4	5
39. Working on site one can easily get hurt	1	2	3	4	5
40. Work on site is unhealthy	1	2	3	4	5
41. Work on site is dangerous	1	2	3	4	5
42. Work on site 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

