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**SAFETY COMPLIANCE AT THE WORKPLACE:
EMPLOYEES AT MANUFACTURING SMALL AND
MEDIUM ENTERPRISES (SMEs) IN KEDAH**

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UUM
Universiti Utara Malaysia

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IN KEDAH**

By

AMNAH BINTI SHEIKH ABDUL TAWAB AL-IBYARI



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Management



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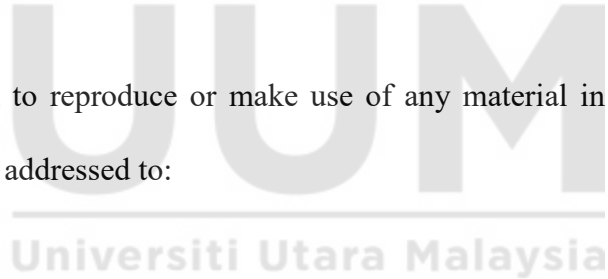
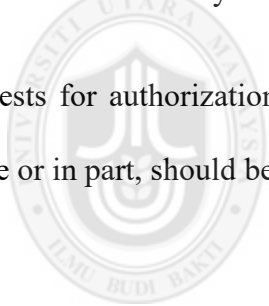
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ABSTRACT

In 2016, the Malaysian government launched a total of 150 small and medium enterprise (SME) development programs with a total funding of RM 5 billion to assist more than 580 000 SMEs and their employees. With respect to long-term prospects, the SME Master Plan 2012 – 2020, apart from being intended to transform SMEs so as to achieve a high income nation status by 2020, is aimed to identify and facilitate the implementation of immediate actions to reduce the occupational death rate to 4.36/100, 000 workers and accident rate to 2.53/1000 workers, as well as to increase the quality of work poisoning to 30 percent through the enhancement of safety compliance at SMEs. The purpose of this study is to examine the positive relationships between (1) safety rules and procedures, (2) safety participation, (3) communication, (4) safety training, (5) management commitment, (6) work environment, and safety compliance. A cross-sectional study was conducted. Data was gathered through a questionnaire distributed to workers of the manufacturing sector of SMEs (n = 124). Data analysis was done using SPSS version 20.0. This study applied factor analysis, descriptive statistics, reliability analysis and inferential analysis to examine the relationships among the variables. Multiple regression results showed that the significant variables related to safety compliance are communication, safety training, and work environment and accounted for 63.6% of the total variance. The theoretical and managerial implications of the findings are discussed and the results of this study can be utilized by manufacturing SMEs, government agencies, general community, stakeholders, national social partners, and the general public to increase the efficiency and productivity of SMEs as well as competitiveness between organizations and employees to adopt a better quality of life as per standard OSH practices and effective safety compliance.

Keywords : *Small Medium Enterprise, safety compliance, safety rules and procedures, safety participation, communication, safety training, management commitment, work environment*

ABSTRAK

Dalam tahun 2016, Kerajaan Malaysia telah melancarkan 150 pelan program pembangunan dengan peruntukan sebanyak RM 5 billion untuk mencapai sasaran 580,000 Perusahaan Kecil dan Sederhana (PKS) serta pekerjanya. Kelihatannya dalam jangka masa panjang, melalui Pelan Induk Perusahaan Kecil Dan Sederhana (2012-2020), Perusahaan Kecil dan Sederhana bukan sahaja dijadikan sebagai platform untuk meningkatkan pendapatan rakyat Malaysia, sebaliknya pelan induk ini juga mengambil pendekatan pintas dalam pelaksanaan strategi yang efektif untuk mengurangkan kadar kematian di tempat kerja sebanyak 4.36/100,000 pekerja, kadar kemalangan kerja sebanyak 2.53/1000 pekerja dan seterusnya peningkatan sebanyak 30 peratus dalam kedudukan kualiti kerja dengan meningkatkan mutu amalan pematuhan keselamatan pada pekerja Perusahaan Kecil dan Sederhana. Tujuan kajian ini adalah untuk mengkaji hubungan positif antara prosedur dan peraturan keselamatan, penglibatan dalam keselamatan, komunikasi, latihan keselamatan, penglibatan pihak pengurusan dan keadaan persekitaran tempat kerja dengan pematuhan keselamatan dan kajian ini telah memilih kajian melalui keratan rentas. Data dikumpulkan melalui soal selidik daripada pekerja PKS (n=124). Data yang diperoleh dianalisis dengan menggunakan SPSS versi 20.0. Kajian ini telah menggunakan analisis faktor, statistik deskriptif, analisis kebolehpercayaan dan analisis jitu-untuk mengkaji hubungan antara pemboleh ubah. Keputusan regresi menunjukkan bahawa hanya pemboleh ubah komunikasi, latihan keselamatan dan keadaan persekitaran tempat kerja yang signifikan dengan pematuhan keselamatan dan 63.6% menjelaskan jumlah keseluruhan varian. Teori dan implikasi pengurusan juga dibincangkan untuk memperkukuhkan hasil kajian. Semua maklumat yang diperoleh dijangka dapat dimanfaatkan oleh PKS terutamanya dalam sektor perkilangan supaya lebih efisien, berdaya saing sesama industri dan mempunyai kualiti hidup yang lebih baik melalui amalan pematuhan kepada keselamatan dan kesihatan di tempat kerja yang berkesan. Selain dari itu agensi kerajaan, organisasi awam dan swasta, masyarakat, pemegang saham dan semua PKS juga tidak terkecuali dari mendapat manfaatnya.

Katakunci : Perusahaan Kecil dan Sederhana, pematuhan keselamatan, garis panduan dan prosedur keselamatan, penglibatan dalam keselamatan, komunikasi, latihan keselamatan, komitmen pihak pengurusan, persekitaran tempat kerja

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List of Abbreviations

Abbreviation	Description of Abbreviation
SME	Small and Medium Enterprise
SOCISO	Social Security Organization
GDP	Gross Domestic Product
OSH	Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
DOSH	Department of Occupational and Safety Health
SMEWG	Small and Medium Enterprises Working Group
WEO	World Economic Outlook
DIPP	Department of Industrial Policy Promotion
OSH_MP15	Occupational Safety and Health Master Plan
EU	European Union
SCT	Social Cognitive Theory
SPSS	Statistical Package for Social Sciences
KMO	Kaiser-Mayer Olkin
VARIMAX	Varian Maximum

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The global economic activity is picking up in light of long-awaited recoveries in investments, manufacturing and trade (International Monetary Fund, 2017). The expected growth of the global economy is from 3.1 percent in 2016 to 3.5 percent in 2017 and 3.6 percent in 2018. According to (International Monetary Fund, 2016), as per the World Economic Organization WEO information released in January 2016, the global economic activity in 2015 remained subdued, but a growth of over 70 percent was seen in emerging markets and developing economies. Across the world, 95 percent of business companies are small and medium enterprises (SMEs), with the private sector accounting for approximately 60 percent of the total employment in such enterprises (Ayyagari, Demircuc-Kunt, & Maksimovic, 2011). Based on the 2016 European Commission report, SMEs are a backbone to the European Union EU28 economy simultaneously in 2015, circa 23 million SMEs generated €3.9 trillion in revenue and employed about 90 million people in the region. Approximately 80 percent of job opportunities in India came from SMEs. Also, the small medium business SMB Chamber of Commerce (a company in India) and Ministry of Micro, Small and Medium Enterprises reported that currently, the total number of SMEs in India is more than 48 million, which has created about 1.3 million job opportunities. In 2017, the Indian SME sector is likely to utilize both e-commerce and m-commerce to generate more revenue (Patil, 2016). In Malaysia, 362 099 businesses in the distributive sector were categorized as SMEs, which accounted

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REFERENCES

- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior and human decision process*. Englewood Cliffs, NJ: Prentice Hall.
- Al-Refaie, A. (2013). Factors affect companies' safety performance in Jordan using structural equation modeling. *Safety Science*, 57, 169-178. doi:10.1016/j.ssci.2013.02.010
- Ashill, N. J., Carruthers, J., & Krisjanous, J. (2006). The effect of management commitment to service quality on frontline employees' affective and performance outcome: An empirical investigation of the New Zealand public healthcare sector. *International Journal of Nonprofit and Voluntary Sector Marketing*, 11(4), 271-287. doi:10.1002/nvsm.281
- Awan, A. G., & Tahir, M. T. (2015). Impact of working environment on employee's productivity: A case study of Banks and Insurance Companies in Pakistan. *European Journal of Business and Management*, 7(1), 329-347. Retrieved from <http://iiste.org/Journals/index.php/EJBM/article/viewFile/18911/19378>
- Awodele, O., Popoola, T. D., Ogbudu, B. S., Akinyede, A., Coker, H. A. B., & Akintonwa, A. (2014). Occupational hazards and safety measures amongst the paint factory workers in Lagos, Nigeria. *Safety and Health at Work*, 5(2), 106-111. doi:10.1016/j.shaw.2014.02.001
- Ayyagari, M., Demirguc-Kunt, A., & Maksimovic, V. (2011). *Small vs. young firms across the world contribution to employment, job creation, and growth*. World Bank Policy Research Working Paper No. 5631. Retrieved from <https://papers.ssrn.com/sol3/Delivery.cfm/5631.pdf?abstractid=1807732&mirid=1>
- Baffour, B., & Valente, P. (2012). An evaluation of census quality. *Statistical Journal of the IAOS*, 28(3,4), 121-135. doi:10.3233/SJI-2012-0752
- Baldock, R., James, P., Smallbone, D., & Vickers, I. (2006). Influences on small-firm compliance-related behaviour: The case of workplace health and safety. *Environment and Planning C: Politics and Space*, 24(6), 827-846. doi:10.1068/c0564
- Bandura, A., & Abrams, K. (1986). *Self-regulatory mechanisms in motivating, apathetic, and despondent reaction to unfulfilled standards*. Unpublished manuscript, Stanford University, Stanford, California.
- Bank Negara Malaysia. (2013). *Circular on new definition of Small and Medium Enterprises (SMEs)*. Retrieved from http://www.bnm.gov.my/files/2013/sme_cir_028_1_new.pdf

- Barbaranelli, C., Petitta, L., & Probst, T. M. (2015). Does safety climate predict safety performance in Italy and the USA? Cross-cultural validation of a theoretical model of safety climate. *Accident Analysis & Prevention*, 77, 35-44. doi:10.1016/j.aap.2015.01.012
- Beaver G. (2003). Management and the small firm. *Strategic Change*, 12(2), 63-68. doi:10.1002/jsc.623
- Bernama. (2013, July 6). DOSH identifies negligence in second Penang bridge ramp collapse. *Malaysiakini*. Retrieved from www.malaysiakini.com/news/234970
- Boughaba, A., Hassane, C., & Roukia, O. (2014). Safety culture assessment in petrochemical industry: A comparative study of two algerian plants. *Safety and Health at Work*, 5(2), 60-65. doi:10.1016/j.shaw.2014.03.005
- Brislin, R. W. (1970). Back translation for the cross-cultural research. *Journal of Cross Cultural Research*, 1(3), 185-216. doi:10.1177/135910457000100301
- Brown, R. L., & Holmes, H. (1986). The use of factor-analytic procedure for assessing the validity of an employee safety climate model. *Accident Analysis and Prevention*, 18(6), 455-470. Retrieved from <http://158.132.155.107/posh97/private/culture/safety-climate-model-Brown.pdf>
- Cagno, E., Micheli, G. J. I., & Perotti, S. (2011). Identification of OSH-related factors and interactions among those and OSH performance in SMEs. *Safety Science*, 49, 216-225. doi:10.1016/j.ssci.2010.08.002
- Cagno, E., Micheli, G. J. I., Masi, D., & Jacinto, C. (2013). Economic evaluation of OSH and its way to SMEs: A constructive review. *Safety Science*, 53, 134-152. doi:10.1016/j.ssci.2012.08.016
- Chen, S. (2017). Journal of Air Transport Management Paternalistic leadership and cabin crews ' upward safety communication : The motivation of voice behavior. *Journal of Air Transport Management*, 62, 44-53. <https://doi.org/10.1016/j.jairtraman.2017.02.007>
- Cavana, R. Y., Delahaye, B. L., & Sekaran, U. (2001). *Applied business research: qualitative and quantitative methods* (1st ed.). US & Australia: John Wiley & Sons Australia, Ltd.
- Cheyne, A. T. J., Cox, S., Oliver, A., & Tomás, J. M. (1998). Modelling safety climate in the prediction of level of safety activity. *Work & Stress*, 12(3), 255-271. doi:10.1080/02678379808256865
- Cheyne, A., & Cox, S. (1994, November). *A comparison of employee attitudes to safety*. Paper presented at the Proceeding of the Fourth Conference on safety and well-being at work, Loughborough University of Technology, UK.

- Chmiel, N., Laurent, J., & Hansez, I. (2017). Employee perspectives on safety citizenship behaviors and safety violations. *Safety Science*, 93, 96–107. <https://doi.org/10.1016/j.ssci.2016.11.014>
- Chua, Y. P. (2012). *Kaedah dan statistik penyelidikan: Kaedah penyelidikan* (2nd ed.). Shah Alam: Mc-Graw Hill Education.
- Clarke, S. (2006). The relationship between safety climate and safety performance: A meta-analytic review. *Journal of Occupational Health Psychology*, 11(4), 315-327. doi:10.1037/1076-8998.11.4.315
- Clemes, S. A., Haslam, C. O., & Haslam, R. A. (2009). What constitutes effective manual handling training? A systematic review. *Occupational Medicine*, 60(2), 101-107. doi:10.1093/occmed/kqp127
- Cohen, A. (1977). Factor in successful occupational safety programs. *Journal of Safety Research*, 9(4), 168-178. Retrieved from http://csemails.elsevier.com/JSR/JSR_1147.pdf
- Cohen, H. H., & Jensen, R. C. (1984). Measuring the effectiveness of an industrial lift truck safety training program. *Journal of Safety Research*, 15(3), 125-135. doi:10.1016/0022-4375(84)90023-9
- Company fined RM20,000 over fatal tower crane crash. (2012, September 12). *The Star Online*. Retrieved from <http://www.thestar.com.my/news/community/2012/09/12/company-fined-rm20000-over-fatal-tower-crane-crash/>
- Cooper, M. D. (2006). Exploratory Analyses of the effects of managerial support and feedback consequences. *Journal of Organizational Behaviour Management*, 26(3), 1-41. doi:10.1300/J075v26n03_01
- Cooper, M. D., & Philips, R. A. (2004). Exploratory analysis of the safety climate and safety behavior relationship. *Journal of Safety Research*, 35(5), 497-512. doi:10.1016/j.jsr.2004.08.004
- Cox, S. J., & Cheyne, A. J. T. (2000). Assessing safety culture in offshore environments. *Safety Science*, 34(1), 111-129. doi:10.1016/S0925-7535(00)00009-6
- Cox, S., & Cox, T. (1991). The structure of employee attitudes to safety: An European example. *Work & Stress*, 5(2), 93-106. doi:10.1080/02678379108257007
- Cunningham, T., & Sinclair, R. (2015). Application of a model for delivering OSH to smaller businesses: Case studies from the U.S. *Safety Science*, 71(100), 213-225. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4544669/pdf/nihms712052.pdf>

- Dahl, Ø., & Olsen, E. (2013). Safety compliance on offshore platforms: A multi-sample survey on the role of perceived leadership involvement and work climate. *Safety Science*, 54, 17-26. doi:10.1016/j.ssci.2012.11.003
- Dalkilic, S. (2017). Improving aircraft safety and reliability by aircraft maintenance technician training. *Engineering Failure Analysis*, 82(June), 687–694. <https://doi.org/10.1016/j.engfailanal.2017.06.008>
- Dedobbeleer, N., & Béland, F. (1991). A safety climate measure for construction sites. *Journal of Safety Research*, 22(2), 97-103. doi:10.1016/0022-4375(91)90017-P
- DeJoy, D. M. (1985). Attributional process and hazard control management in industry. *Journal of Safety Research*, 16(2), 61-71. doi:10.1016/0022-4375(85)90008-8
- DeJoy, D. M., Della, L., J., Vandenberg, R. J., & Wilson, M. G. (2010). Making work safer: Testing a model of social exchange and safety management. *Journal of Safety research*, 41(2), 163-171. doi:10.1016/j.jsr.2010.02.001
- Dekker, S. W. A. (2005). *Ten questions about human error: A new view of human factors and system safety*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Department of Occupational Safety and Health Malaysia. (2010a). *Occupational Safety and Health Master Plan for Malaysia 2015 (OSH-MP 15)*. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-bangkok/documents/policy/wcms_182420.pdf
- Department of Occupational Safety and Health Malaysia. (2010b). *Laporan Tahunan 2010*. Retrieved from <http://www.dosh.gov.my/index.php/en/archive-publication>
- Department of Occupational Safety and Health Malaysia. (2014). *Prosecution*. Retrieved from <http://www.dosh.gov.my/index.php/en/osh-info-2/prosecution-case>
- Department of Occupational Safety and Health Malaysia. (2015). *Laporan Tahunan 2015*. Retrieved from <http://www.dosh.gov.my/index.php/en/publication-sp-249/annual-report/2353-laporan-tahunan-jkkp-malaysia-2015/file>
- Department of Occupational Safety and Health Malaysia. (2016). *Strategic plan for occupational safety and health in small and medium industry sector 2016-2020*. Retrieved from <http://www.dosh.gov.my/index.php/ms/iks/pelan-strategik-iks-2020-versi-eng/file>
- Department of Occupational Safety and Health Malaysia. (2017). *Occupational accident statistic by sector until April 2017*. Retrieved from <http://www.dosh.gov.my/index.php/en/occupational-accident-statistics/by-sector>
- Department of Statistics Malaysia. (2015). *Census of distributive trade report 2014: Sales value of goods and services for distributive trade sector in 2013 grew by 6.6%*

compared to 2008. Retrieved from <https://www.dosm.gov.my/v1/index.php?r=column/pdfPrev&id=U1FoUzF2WjBERmgzWHd5elZZVknWQT09>

- Didonet, S R., & Díaz, G. (2012). Supply chain management practices as a support to innovation in SMEs. *Journal of Technology Management & Innovation*, 7(3), 91-109. doi:10.4067/S0718-27242012000300009.
- Diugwu, I. A. (2011). Re-strategising for effective health and safety standards in small and medium-sized enterprises. *Open Journal of Safety Science and Technology*, 1(3), 115-128. doi:10.4236/ojsst.2011.13013
- 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
- Elling, M. G. M. (1987). Veilig werken volgens geschreven procedures: illusies en werkelijkheid [Safe working following written procedures: Illusion and reality]. *Communicatie in Bedrijf en Beroep: Toegepaste Taalwetenschap*, 2, 133-143.
- Environment Agency. (2000). *Business decision-making and the environment* (R7D technical report E98). Bristol: Environment Agency.
- European Union- Occupational Safety and Health, (2014). *European Agency for Safety and Health at Work – EU-OSHA. Summary.*
- European Agency for Safety and Health at Work. (2015). *Summary annual report 2014.* Retrieved from <https://osha.europa.eu/en/tools-and-publications/publications/annual-report-2014-summary>
- European Commission. (2016). *Annual report on European SMEs 2015/2016.* Retrieved from https://ec.europa.eu/jrc/sites/jrersh/files/annual_report_-_eu_smes_2015-16.pdf
- Fabiano, B., Currò, F., & Pastorino, R. (2004). A study of the relationship between occupational injuries and firm size and type in the Italian industry. *Safety Science*, 42(7), 587-600. doi:10.1016/j.ssci.2003.09.003
- Fernández-Muñiz , B., Montes-Peón, J. M., & Vázquez-Ordás, C. (2007). Safety culture: Analysis of the causal relationships between its key dimensions. *Journal of Safety Research*, 38(6), 627-641. doi:10.1016/j.jsr.2007.09.001
- Fernando, Y., Zailani, S., & Janbi, L. (2008, December). *The determinant factors of safety compliance at petrochemical processing area: Moderator effects of employees experience and engineering background.* Paper presented at the Proceedings of the 9th Asia Pasific Industrial Engineering & Management Systems Conference (APIEMS), Nusa Dua, Bali, Indonesia. Retrieved from

http://s3.amazonaws.com/academia.edu.documents/705301/175-Yudi_Fernando.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1499215483&Signature=Uh5MMg3kSl6sAKfLJ10XHHGUsqQ%3D&response-content-disposition=inline%3B%20filename%3DThe_Determinant_Factors_of_Safety_Compli.pdf

- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior. An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Flin, R. K., & O'Connor, P. (2000). Applying Crew resource management on offshore oil platforms. In E. Salas, C. A. Bowers, E. Edens. (Eds.), *Improving teamwork in organizations: Applications of resources management training*. Boca Raton, FL: CRC Press.
- Flin, R., Mearns, K., O'Connor, P., & Bryden, R. (2000). Measuring safety climate: Identifying the common features. *Safety Science*, 34(1-3), 177-192. doi:10.1016/S0925-7535(00)00012-6
- Frick, K. (2011). Worker influence on voluntary OHS management systems – A review of its ends and means. *Safety Science*, 49(7), 974-987. doi:10.1016/j.ssci.2011.04.007
- Gerstenfeld, A., & Roberts, H. (2000). Size matters: Barriers and prospects for environmental management in small and medium sized enterprises. In R. Hillary (Ed.), *Small and medium sized enterprises and the environment: Business imperatives* (pp. 106-118). Sheffield, UK: Greenleaf Publishing.
- Ghedini, N. (2014, October 30). The importance of health and safety training for OSHA compliance [Web log message]. Retrieved from <http://www.ecsconsult.com/blog/author/nicole-ghedini/page/3?hsFormKey=56167b1c0dd8309e25837fb553a20392>
- Gilkey, D. P., Keefe, T. J., Hautaluoma, J. E., Bigelow, P. L., Herron, R. E., Stanley, & S. A. (2003). Management commitment to safety and health in residential construction: HomeSafe spending trends 1991-1999. *Work*, 20(1), 35-44.
- Glendon, A. I., & Litherland, D. K. (2001). Safety climate factors, group differences and safety behaviour in road construction. *Safety Science*, 39, 157-188. Retrieved from <http://158.132.155.107/posh97/private/culture/safety-climate-factors-Glendon.pdf>
- Green, L. R., & Selman, C. (2005). Factor impacting food workers' and managers' safe food preparation practices: A qualitative study. *Food Protection Trends*, 25(12), 981-990. Retrieved from https://www.cdc.gov/nceh/ehs/ehsnet/docs/factors_impacting_food_workers_food_prep_fpt_journal.pdf

- Griffin, M. A., & Hu, X. (2013). How leaders differentially motivate safety compliance and safety participation: The role of monitoring, inspiring, and learning. *Safety Science*, 60, 196-202. doi:10.1016/j.ssci.2013.07.019
- 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. doi:10.1037/1076-8998.5.3.347
- Groundwork Foundation. (1995). *Small firms and the environment: A groundwork status report*. Birmingham: Groundwork Foundation.
- Guldenmund, F. W. (2000). The nature of safety culture: A review of theory and research. *Safety Science*, 34(1-3), 215-257. doi:10.1016/S0925-7535(00)00014-X
- Hahn, S. E., & Murphy, L. R. (2008). A short scale for measuring safety climate. *Safety Science*, 46(7), 1047-1066. doi:10.1016/j.ssci.2007.06.002
- Hair, J. F., Tatham, R. I., Anderson, R. E., & Black, W. C. (1998). *Multivariate data analysis* (5th ed.). Upper Saddle River, NJ: Prentice-Hall International.
- Hale, A. R., & Borys, D. (2012). Working to rule or working safely? Part 2: The management of safety rules and procedures. *Safety Science*, 55, 222-231. doi:10.1016/j.ssci.2012.05.013
- Hansez, I., & Chmiel N. (2010). Safety behavior: Job demands, job resources, and perceived management commitment to safety. *Journal of Occupational Health Psychology*, 15(3), 267-278. doi:10.1037/a0019528
- Harper, R. S., & Koehn, E. (1998). Managing industrial construction safety in southeast Texas. *Journal of Construction Engineering and Management*, 124(6), 452-457. doi:10.1061/(ASCE)0733-9364(1998)124:6(452)
- Hasle, P., & Limborg, H. J. (2006). A review of the literature on preventive occupational health and safety activities in small enterprises. *Industrial Health*, 44(1), 6-12. doi:10.2486/indhealth.44.6
- Hasle, P., Kines, P., & Andersen, L. P. (2009). Small enterprise owners' accident causation attribution and prevention. *Safety Science*, 47(1), 9-19. doi:10.1016/j.ssci.2007.12.005
- Holmes, N., Lingard, H., Yesilyurt, Z., & De Munk, F. (1999). An exploratory study of meanings of risk control for long term and acute effect occupational health and safety risks in small business construction firms. *Journal of Safety Research*, 30(4), 251-261. doi:10.1016/S0022-4375(99)00020-1
- Hopkins, A. (2011). Risk-management and rule-compliance: Decision-making in hazardous industries. *Safety Science*, 49(2), 110-120. doi:10.1016/j.ssci.2010.07.014

- Hu, X., Griffin, M. A., & Bertuleit, M. (2016). Modelling antecedents of safety compliance: Incorporating theory from the technological acceptance model. *Safety Science*, 87, 292–298. <https://doi.org/10.1016/j.ssci.2015.12.018>
- 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 & Prevention*, 38(3), 425-433. doi:10.1016/j.aap.2005.07.002
- Huang, Y.-H., Verma, S. K., Chang, W.-R., Courtney, T. K., Lombardi, D. A., Brennan, M. J., & Perry, M. J. (2012). Management commitment to safety vs. employee perceived safety training and association with future injury. *Accident Analysis & Prevention*, 47, 94-101. doi:10.1016/j.aap.2011.12.001
- Hutchinson, A., & Chaston, I. (1994, September). *Environmental perceptions, policies and practices in the SME sector: A case study*. Paper presented at the Business Strategy and the Environment Conference, Bradford, UK.
- Inness, M., Turner, N., Barling, J., & Stride, C. B. (2010). Transformational leadership and employee safety performance: A within-person, between-jobs design. *Journal of Occupational Health Psychology*, 15(3), 279-290. doi:10.1037/a0019380
- International Monetary Fund. (2016). *World Economic Outlook: Too slow for too long*. Retrieved from file:///C:/Users/ASUS/Downloads/_textpdf.pdf
- International Monetary Fund. (2017). *World Economic Outlook, April 2017: Gaining Momentum?* Retrieved from <http://www.imf.org/en/Publications/WEO/Issues/2017/04/04/world-economic-outlook-april-2017>
- Ismail, F., Torrance, J. V., T. A., Abdul Majid, M. Z. (2007, July). *The reflection of management commitment on OSH within the Malaysia construction organisations*. Proceeding of the 10th Conference and Exhibition on Occupational Safety & Health, Genting International Convention Centre (GICC), Genting Highlands, Pahang, Malaysia.
- Jiang L., Yu, G., Li, Y., & Li, F. (2010). Perceived colleagues' safety knowledge/behavior and safety performance: Safety climate as a moderator in a multilevel study. *Accident Analysis & Prevention*, 42(5), 1468-1476. doi:10.1016/j.aap.2009.08.017
- Kedah to implement state transformation plan. (2013, June 2). *Astro Awani*. Retrieved from <http://english.astroawani.com/malaysia-news/kedah-implement-state-transformation-plan-15469>
- Karanikas, N. (2017). Evaluating the horizontal alignment of safety management activities through cross-reference of data from safety audits, meetings and investigations. *Safety Science*, 98, 37–49. <https://doi.org/10.1016/j.ssci.2017.05.008>

- Kingdom, U., Besserman, J., & Mentzer, R. A. (2017). Journal of Loss Prevention in the Process Industries Review of global process safety regulations: United States , European. *Journal of Loss Prevention in the Process Industries*, 50, 165–183. <https://doi.org/10.1016/j.jlp.2017.09.010>
- Kline, R. B. (2015). *Principles and Practice of Structural Equation Modeling*. Fourth Edition
- Komaki, J., Barwick, K. D., & Scott, L. R. (1978). A behavioral approach to occupational safety: Pinpointing and reinforcing safe performance in a food manufacturing plant. *Journal of Applied Psychology*, 63(4), 434-445. doi:10.1037/0021-9010.63.4.434.
- Krejcie, R., & Morgan, D. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607-610. doi:10.1177/001316447003000308
- Lamm, F. (1999). *Occupational health and safety in Australian small business: What can be done to reduce the lack of awareness and raise the level of compliance in Australian small business?* Sydney: Industrial Relations Research Centre, University of New South Wales.
- Laurence, D. (2005). Safety rules and regulations on mine sites: The problem and a solution. *Journal of Safety Research*, 36(1), 39-50. doi:10.1016/j.jsr.2004.11.004
- Legg, S. J., Olsen, K. B., Laird, I. S., & Hasle, P. (2015). Managing safety in small and medium enterprises. *Safety Science*, 71, 189-196. doi:10.1016/j.ssci.2014.11.007
- Legg, S., Laird, I., Olsen, K., & Hasle, P. (2014). Guest editorial: Special issue – Understanding small enterprises: Healthy lives in healthy businesses. *Small Enterprise Research*, 21(2), 139-147. doi:10.1080/13215906.2014.11082083
- Li, F., Jiang, L., Yao, X., & Li, Y. (2013). Job demands, job resources and safety outcomes: The roles of emotional exhaustion and safety compliance. *Accident Analysis & Prevention*, 51, 243-251. doi:10.1016/j.aap.2012.11.029
- Lien, L. B., & Knudsen, E. S. (2012). Norwegian businesses through the crisis: An overview. *Magma: Econa's Journal of Economics and Management*, 6, 40-51. Retrieved from <https://www.magma.no/norske-bedrifter-gjennomkrisen-en-oversikt>
- Lin, J., & Mills, A. (2001). Measuring the occupational health and safety performance of construction companies in Australia. *Facilities*, 19(3/4), 131-139. doi:10.1108/02632770110381676
- Liu, Y., Zhang, Q., & Li, Q. (2014). A research on mechanisms and countermeasures of the food safety incidents occurring on food supply chain. *Journal of Service Science and Management*, 7(4), 337-345. doi:10.4236/jssm.2014.74030.

- MacEachen, E., Kosny, A., Scott-Dixon, K., Facey, M., Chambers, L., Breslin, C., ... Small Business Systematic Review Team. (2010). Workplace health understandings and processes in small businesses: A systematic review of the qualitative literature. *Journal of Occupational Rehabilitation*, 20(2), 190-198. doi:10.1007/s10926-009-9227-7.
- Mahmood, R., Mohd, Isa, M. F., Mustafa, L., Abdul Aziz, F. S., & Salleh, A. (2010, November). *Safety behaviour: The role of safety commitment*. Paper presented at the Proceeding of the ICBER 2010 International Conference, Kuala Lumpur, Malaysia. Retrieved from http://www.internationalconference.com.my/proceeding/icber2010_proceeding/PAPER_214_SafetyBehaviour.pdf
- Maslen, S., & Ransan-cooper, H. (2017). Safety framing and compliance in relation to standards : Experience from the Australian gas pipeline industry. *Safety Science*, 94, 52–60. <https://doi.org/10.1016/j.ssci.2016.12.011>
- Marsh, T. W., Davies, R., Phillips, R. A., Duff, A. R., Robertson, I. T., Weyman, A., & Cooper, M. D. (1998). The role of management commitment in determining the success of a behavioural safety intervention. *Journal of the Institution of Occupational Health & Safety*, 2(2), 45-56. Retrieved from http://behavioral-safety.com/articles/The_role_of_managerial_commitment_in_Behavior_Based_Safety.pdf
- Mayhew, C. (1999). Why owner/managers in small business miss out [Owner/managers of car maintenance and repair garages are reliant on suppliers for advice on hazardous substances and manual handling]. In C. L. Peterson (Ed.), *Occupational Health and Safety in Australia: Industry, Public Sector and Small Business* (pp.116-126, 187-198). Sydney, Australia: Allen & Unwin.
- Mearns, K., & Hope, L. (2005). *Health and well-being in the offshore environment: The management of personal health*. (305 ed.) (Research Report; No. 305). Sudbury: Health and Safety Executive.
- Mearns, K., Hope, L., Ford, M. T., & Tetrick, L. E. (2010). Investment in workforce health: Exploring the implications for workforce safety climate and commitment. *Accident Analysis & Prevention*, 45(5), 1445-1454. doi:10.1016/j.aap.2009.08.009.
- 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. doi:10.1016/S0925-7535(02)00011-5
- Mendeloff, J. M., & Kagey, B. T. (1990). Using Occupational Safety and Health administration accident investigation to study patterns in work fatalities. *Journal of Occupational Medicine*, 32(11), 1117-1123. Retrieved from https://www.researchgate.net/publication/20896843_Using_Occupational_Safety_an

d_Health_Administration_Accident_Investigations_to_Study_Patterns_in_Work_Fatalities

Ministry of Human Resources. (2015). *OCCUPATIONAL SAFETY AND HEALTH MASTER PLAN FOR MALAYSIA 2015 (osh-mp 15)*.

Micheli, G. J. L., & Cogno, E. (2010). Dealing with SMEs as a whole in OHS issues: Warnings from empirical evidence. *Safety Science*, 48(6), 729-733. doi:10.1016/j.ssci.2010.02.010

Mullen, J., Kelloway, E. K., & Teed, M. (2017). Employer safety obligations , transformational leadership and their interactive effects on employee safety performance q. *Safety Science*, 91, 405-412. <https://doi.org/10.1016/j.ssci.2016.09.007>

National SME Development Council. (2012). *SME MASTERPLAN 2012-2020 - Catalysing Growth and Income*.

Nakpodia, E. D. (2011). Work environment and productivity among primary school teachers in Nigeria. *African Research Review*, 5(5), 367-381. doi:10.4314/afrrrev.v5i5.29

Neal, A., & Griffin, M. A. (1997, February). *Perception of safety at work: Developing a model to link organization safety climate and individual behaviour*. Paper presented at the 12th Annual Conference of the Society for Industrial and Organizational Psychology, St. louis, MO.

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. doi:10.1037/0021-9010.91.4.946

Occupational Safety And Health Act 1994 [Act 514].

Okun, A., Lentz, T. J., Schulte, P., & Stayner, L. (2001). Identifying high-risk small business industries for occupational safety and health interventions. *American Journal of Industrial Medicine*, 39(3), 301-311. doi:10.1002/1097-0274(200103)39:3<301::AID-AJIM1018>3.0.CO;2-L

Opperman, C. S. (2002). *Tropical business issues*. Partner Price Water House Coopers. Retrieved from <http://www.pricewaterhousecoopers/zambiaeconomists>
Parker, S. C., Storey, D., & van Witteloostuijn, A. (2010). What happens to gazelles? The importance of dynamic management strategy. *Small Business Economics*, 35(2),

203-226. doi:10.1007/s11187-009-9250-2

- Patil, P. P. (2016). *Understanding and overcoming barriers to technology adoption among India's micro, small and medium enterprises*. Retrieved from <https://www.linkedin.com/pulse/understanding-overcoming-barriers-technology-adoption-pritesh-patil>
- Petitta, L., Probst, T. M., Barbaranelli, C., & Ghezzi, V. (2017). Disentangling the roles of safety climate and safety culture : Multi-level effects on the relationship between supervisor enforcement and safety compliance. *Accident Analysis and Prevention*, 99, 77–89. <https://doi.org/10.1016/j.aap.2016.11.012>
- Petts, J. (2000). SMEs and environmental compliance: Attitudes among management and non-management. In R. Hillary (Ed.), *Small and medium-sized enterprises and the environment* (pp. 49-60). Sheffield: Greenleaf Publishing Ltd.
- Petts, J., Herd, A., Gerrard, S., & Horne, C. (1999). The climate and culture of environmental compliance within SMEs. *Business Strategy and the Environment*, 8(1), 14-30. doi:10.1002/(SICI)1099-0836(199901/02)8:13.0.CO;2-4
- Pilbeam, C., Doherty, N., Davidson, R., & Denyer, D. (2016). Safety leadership practices for organizational safety compliance : Developing a research agenda from a review of the literature. *Safety Science*, 86, 110–121. <https://doi.org/10.1016/j.ssci.2016.02.015>
- Robotham, G. (2001). Safety training that work. *Professional Safety*, 46(5), 33-37.
- Sekaran, U., & Bougie, R. (2009). *Research methods for business: A skill building approach* (5th ed.). United Kingdom: John Wiley & Sons Ltd.
- Sekaran, U., & Bougie, R. (2013). *Research methods for business: A skill-building approach*. (6th ed.). Chichester: Wiley.
- Sijtsma, K. (2008). On the use, the misuse, and the very limited usefulness of Cronbach's alpha. *Psychometrika*, 74(1), 107-120. doi:10.1007/s11336-008-9101-0
- SME Corp. Malaysia. (n.d.). *SME Corporation Malaysia - State Office*. Retrieved from www.smecorp.gov.my/index.php/en/state-offices
- SME Corp. Malaysia. (2012). *SME Masterplan 2012-2020: Catalysing growth and income*. Retrieved from <http://www.smecorp.gov.my/index.php/en/resources/2015-12-21-11-07-06/sme-masterplan/book/11-sme-masterplan-english/3-sme-masterplan>
- SME Corp. Malaysia. (2013). *Guideline for new SME definition*. Retrieved from http://www ofs.org.my/file/files/Guidelines%20on%20New%20Definition%20of%20SME%202013__SME%20Corporation.pdf

- SME Corp. Malaysia. (2016). *SME Annual Report - 2015/2016*. Retrieved from <http://www.smecorp.gov.my/images/Publication/Annual-report/SME%20AR%202015-16%20English%20Final%20web.pdf>
- Smith, T. D., & DeJoy, D. M. (2014). Safety climate, safety behaviors and line-of-duty injuries in the fire service. *International Journal of Emergency Services*, 3(1), 49-64. doi:10.1108/IJES-04-2013-0010
- Social Security Organization. (2015). *Annual Report 2015*. Retrieved from https://www.perkeso.gov.my/images/Laporan_Tahunan_2015.pdf
- Steven, G. (1999). Features - workplace injuries in small and large manufacturing workplace - an analysis of the risks of fatal and non-fatal injuries, including figures for 1994/5-1995/6. *Labour Market trends*, 107, 19-26.
- Suruda, A., & Wallace, D. (1996). Fatal work-related injuries in the U.S. chemical industry 1984-89. *Intertional Archives of Occupational Environmental Health*, 68(6), 425-428. doi:10.1007/BF00377864
- Tappura, S., & Nenonen, N. (2017). Managers ' viewpoint on factors influencing their commitment to safety: An empirical investigation in five Finnish industrial organisations. *Safety Science*, 96, 52–61. <https://doi.org/10.1016/j.ssci.2017.03.007>
- Tucker, S., & Turner, N. (2011). Young worker safety behaviour: Development and validation of measures. *Accident Analysis & Prevention*, 43(1), 165-175. doi:10.1016/j.aap.2010.08.006
- Unnikrishnan, S., Iqbal, R., Singh, A., & Nimkar, I. M. (2015). Safety management practices in small and medium enterprises in India. *Safety and Health at Work*, 6(1), 46-55. doi:10.1016/j.shaw.2014.10.006
- Varonen, U., & Mattila, M. (2000). The safety climate and its relationship to safety practice, safety of work environment and occupational accidents in eight wood-processing companies. *Accident Analysis & Prevention*, 32(6), 761-769. doi:10.1016/S0001-4575(99)00129-3
- Vassie, L., Tomàs, J. M., & Oliver, A. (2000). Health and safety management in UK and Spanish SMEs: A comparative study. *Journal of Safety Research*, 31(1), 35-43. doi:10.1016/S0022-4375(99)00028-6
- Vidal-gomel, C. (2017). Training to safety rules use . Some reflections on a case study. *Safety Science*, 93, 134–142. <https://doi.org/10.1016/j.ssci.2016.12.001>
- Vijayakumar, T. (2007, August). *Achieve total safety culture through behaviour based safety*. Paper presented at the Proceeding of the 10th Conference and Exhibition on Occupational Safety and Health (OSH): Reinforcing the Commitment (pp. 303-313). Genting Highlands, Malaysia.

- 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 behaviour: Assessing the mediating role of safety knowledge and motivation. *Accident Analysis & Prevention*, 42(6), 2082-2093. doi:10.1016/j.aap.2010.06.021
- Vinodkumar, M. N., & Bhasi, M. (2011). A study on the impact of management system certification on safety management. *Safety Science*, 49(3), 498-507. doi:/10.1016/j.ssci.2010.11.009
- Vrenderburgh, A. (2002). Organization safety: Which management practices are most effective in reducing employee injury rates? *Journal of Safety Research*, 33(2), 259-276. doi:10.1016/S0022-4375(02)00016-6
- Walters, D. (2006). The Efficacy of strategies for chemical risk management in small enterprise in Europe: Evidence for success? *Policy Practice in Health and Safety*, 4(1), 81-116. doi:10.1080/14774003.2006.11667677
- 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(1-3), 15-27. doi:10.1016/S0925-7535(97)00020-9
- Yagil, D., & Luria, G. (2010). Friends in need: The protective effect of social relationships under low-safety climate. *Group & Organization Management*, 35(6), 727-750. doi:10.1177/1059601110390936
- Zahoor, H., Chan, A. P. C., Utama, W. P., & Gao, R. (2015). A research framework for investigating the relationship between safety climate and safety performance in the construction of multi-storey buildings in Pakistan. *Procedia Engineering*, 118, 581-589. doi:10.1016/j.proeng.2015.08.488
- Zin, S. M., & Ismail, F. (2012). Employers' behavioural safety compliance factors toward occupational, safety and health improvement in the construction industry. *Procedia - Social and Behavioral Sciences*, 36, 742-751. doi:10.1016/j.sbspro.2012.03.081
- Zohar D. (1980). Safety climate in industrial organizations: Theoretical and applied implications. *Journal of Applied Psychology*, 65(1), 96-102. doi:10.1037/0021-9010.65.1.96
- Zohar, D., & Luria, G. (2005). A multilevel Model of Safety Climate: Cross-level relationships between organization and group-level climates. *Journal of Applied Psychology*, 90(4), 616-628. doi:10.1037/0021-9010.90.4.616
- Zohar, D., Cohen, A., & Azar, N. (1980). Promoting increased use of ear protectors in noise through information feedback. *Human Factors*, 22(1), 69-79.

10.1177/001872088002200108

