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Occupational Safety and Health (OSH) Enforcement Officers' Perception Towards Imposing Punitive Action Against Errand Employers in Manufacturing Sector in Kelantan

Ramli Hassan¹, Ahmad Rasdan Ismail^{1,2}, Nor Kamilah Makhtar³ and Norfadzilah Jusoh¹

¹Faculty of Creative Technology & Heritage, Universiti Malaysia Kelantan, 16300 Bachok, Kelantan, Malaysia

²Centre for Management of Environment, Occupational Safety and Health (CMeOSH), Universiti Malaysia Kelantan, 16300 Bachok, Kelantan, Malaysia ³Department of Educational Planning and Research, Institute of Teacher Education,

Campus Kota Bharu, Kota Bharu, Kelantan, Malaysia

Email: ramli h@mohr.gov.my

Abstract. Compliance to occupational safety and health (OSH) laws in Malaysia is enforced by the Department of Occupational Safety and Health (DOSH), Ministry of Human Resource. The acts involved are Occupational Safety and Health Act 1994 (OSHA) and Factory and Machinery Act 1967 (FMA). Actions taken against employers who breached the laws are either persuasive or punitive. Persuasive and punitive refer to the type of action taken by the enforcement officers against the errand employers. Making remarks in a log book, giving out directive letters and issuing notices (Notice of Prohibition, NOI and Notice of Improvement, NOP) are considered persuasive whilst opening an investigation paper (IP) for the purpose of offering compound and bringing the matter to court are considered punitive. From the statistics, it is clear that the OSH enforcement officers use more persuasive strategy compared to punitive strategy. The objective of the study is to study the perception of OSH enforcement officers towards imposing punitive action against errand employers. The study used questionnaires developed after a thorough literature review on enforcement factors. The questionnaires were distributed to selected population i.e. DOSH Kelantan's officers. The data was analysed using SPSS version 25 software. The study shows that generally the respondents are in favour of imposing punitive actions against errand employers and the most paramount factors in doing so is the knowledge, understanding and expertise in conducting investigation and preparing investigation paper (IP).

1. Introduction

Occupational safety and health (OSH) compliance in Malaysia is enforced by the Department of Occupational Safety and Health (DOSH), an agency under the Ministry of Human Resource (KSM). The OSH enforcement by DOSH is conducted according to 2 main acts i.e. Occupational Safety and Health Act 1994 (OSHA) and Factory and Machinery Act 1967 (FMA) both of which made it compulsory for employers to ensure safety, health and welfare of workers at workplace [1][2].

Among DOSH's enforcement objective are to reduce fatality rate and accident rate at places of work to 4.36 per 100,000 workers and 2.53 per 1,000 workers by the year 2020 respectively [3]. Knowledge and safety practice is important because it can create safety environment in workplace [4]. Figure 1 shows rates of accident for Malaysia from 2004 to 2016.

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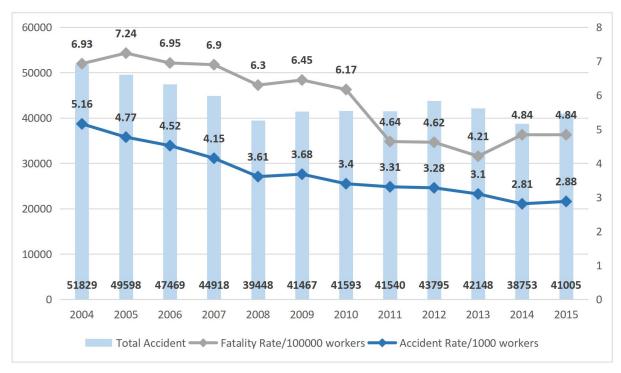


Figure 1. National accident rate from 2004 – 2016 (Source: SOCSO 2017).

In carrying out enforcement activities, DOSH has both practiced persuasive and punitive strategies. Enforcement officers use persuasive as well as punitive strategy in their enforcement work but usually persuasive strategy is used more often, therefore very few individuals or employers who had breached the laws been punished. Furthermore, punishment or sentenced imposed are very little. This situation happened to repeating offenders too [5].

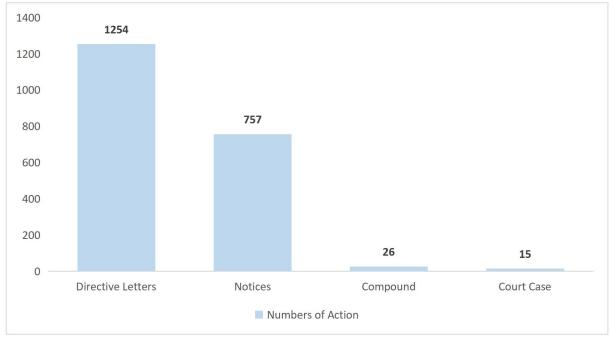


Figure 2. Action taken by DOSH Malaysia against errand employers until November 2017. (Source: DOSH, 2017)

Figure 2 show that the ratio of persuasive action (directive letters and notices) to punitive action (compound and court case) taken by DOSH in 2017 (until November) is 50:1 [6].

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Table 1. Action taken by DOSH Malaysia against errand employers in 2018 (until October).

	Directive	Notice of	Notice of	Compound	Court Case
	Letters	Improvement	Prohibition		
		(NOI)	(NOP)		
Numbers	39,623	13,670	12,112	787	224
Total		65,405		1,0	011
Ratio			65 : 1		

Table 1 shows that in 2018 (until October), the ratio of persuasive strategy to punitive strategy taken by DOSH Malaysia is 65:1 [7].

Table 2. Comparison of strategy used by DOSH Malaysia in its enforcement activities in 2018 (Until October).

Subject	Persuasive	Punitive
Total numbers of DOSH Malaysia's activities	44.1	281 : 1
(Enforcement and investigation)	4.4 : 1	201:1

Table 2 shows that in 2018 (until October), DOSH Malaysia took one persuasive action in every 4.4 activities, while punitive action was taken once in every 281 activities [7]. These figures (Figure 2, table 1 and table 2) show us DOSH officers' tendency in using persuasive strategy compared to punitive strategy.

The research is carried out in order to study OSH enforcement officers' perception towards imposing punitive action against errand employers. In order to do so, the research must first identify enforcement factors that influence OSH enforcement officers' decision in taking action against errand employers (persuasive or punitive).

2. Research Methodology

The methodology used in the research is as showed in table 3.

Table 3. Research framework.

Literature	Identification of enforcement factors that influence the use of persuasive or punitive strategy by enforcement officers.						
Review	Identification	Identification of research population and sample.					
Research	Development of research questionnaires using LIKERT scales [8]						
Methodology	Collecting data through questionnaires.						
	Data analysis using SPSS version 25 software.						
Data	Descriptive Analysis – Descriptive Analysis – Exploratory Factor						
Analysis	Identification of	Analyzing officers'	Analysis-				
	enforcement factors	perception towards	Analyzing the factors in				
	that influence the use of punitive action against order to find the mo						
	persuasive or punitive	errand employers.	important one.				
	strategy by						
	enforcement officers.						

Population chosen in the research is the OSH officers from the Department of Occupational Safety and Health Kelantan since it meets the criteria of easy to find, suitable location, suitable with available time and the samples are ready to take part in the data collection [9].

3. Results and Discussions

Questionnaires developed are according to findings from a thorough literature review on enforcement factors. The factors are shown in table 4.

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Table 4. Enforcement factors.

No.	Factor		Independent Variables	Source		
		i.	Law	landbook of Criminal Investigation –		
1.	Source	ii.	Procedures	Professionalizing Criminal		
		iii.	Records	Investigation [10]		
	Quality of	i.	Knowledge	Theory and Practice of Regulatory		
2.	officers	ii.	Expertise	Enforcement: Occupational Health and		
		iii.	Understanding	Safety Regulation in British Columbia [5]		
		i.	Workload	Theory and Practice of Regulatory		
	Current	ii.	Coaching approach	Enforcement: Occupational Health and		
3.	work		(Compliance support)	Safety Regulation in British Columbia		
	culture	iii.	Opinion that 'informal sanction' is enough.	[5]		
		i.	Ability to control emotion.	Skills & Qualities Necessary to Be an		
4.	Attitudes	ii.	Ethical and honest.	Effective Investigator [11]		
		iii.	Avoiding being second-	Police Chief Magazine - Philosophy of		
			guessed by a third party.	Punishment, Justice, and Cultural		
				Conflict in Criminal Justice [12]		
		i.	Relationship with someone	Theory and Practice of Regulatory		
	External		in the industry.	Enforcement: Occupational Health and		
5.	factors	ii.	Low fined imposed by court.	Safety Regulation in British Columbia [5]		

Demographic information of the respondents is as shown in table 5.

Table 5. Respondents demographic information.

	Subject	Percentage
Sex	Male	83.3
2.0	Female	16.7
Age	Below 30 years old	16.7
	31-40 years old	50.0
	41-50 years old	23.3
	Above 51 years old	10.0
Years of service	Less than 5 years	6.7
	5-10 years	40.0
	11-20 years	33.3
	More than 20 years	20.0
Education	Certificate	26.7
	Diploma	43.3
	Degree	16.7
	Master	13.3
Designation	Director	3.3
	Deputy Director	6.7
	Assistant Director	10.0
	Officers	80.0
Section	Enforcement	13.3
	Statutory Inspection	13.3
	Small and Medium Enterprises	16.7
	Building Construction	10.0
	Health Industry	10.0
	Hygiene Industry	6.7
	Analysis and Process	10.0
	Investigation and Prosecution	6.7
	Promotion	6.7
	Special Risk	3.3

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The population at DOSH Kelantan consists of 31 samples. This research managed to get data from 30 samples which satisfies the table for determining sample size of a known population by Krejie and Morgan (1970) [13]. The samples represent all the categories (sex, age, experience, education, designation and section).

Table 6. Results from questionnaires.

Table 6. Results from questionnaires.								
Factor	Item	SD	D	N	A	SA	Min	Remarks
Law	Item 1	0	3.3	33.3	50	13.3	3.73	
	Item 2	3.3	3.3	23.3	63.3	6.7	3.67	High
	Item 3	0	3.3	33.3	56.7	6.7	3.67	Č
Procedure	Item 4	0	6.7	26.7	63.3	3.3	3.63	
	Item 5	0	20.0	40.0	40.0	0	3.20	
	Item 6	0	6.7	36.7	56.7	0	3.50	
Records and	Item 7	0	6.7	30.0	63.3	0	3.57	Moderate
Equipment	Item 8	0	3.3	46.7	50.0	0	3.47	
	Item 9	3.3	13.3	40.0	43.3	0	3.23	
	Item10	3.3	20.0	23.3	53.3	0	3.27	
	Item11	0	6.7	30.0	63.3	0	3.57	
77 1 1	Item12	10.0	3.3	46.7	40.0	0	3.17	TT' 1
Knowledge	Item13	3.3	0	20.0	73.3	3.3	3.73	High
	Item14	3.3	3.3	23.3	63.3	6.7	3.67	3.6 1 .
	Item15	3.3	3.3	23.3	66.7	3.3	3.63	Moderate
	Item16	3.3	6.7	33.3	53.3	3.3	3.47	TT! - 1.
	Item17	0	3.3	13.3	80.0	3.3	3.83	High
	Item18	0	3.3	10.0	83.3	3.3	3.87	M - 1 4 -
I In donaton din a	Item19	0	16.7	26.7	56.7	0	3.40	Moderate
Understanding	Item20 Item21	$0 \\ 0$	3.3 6.7	23.3 30.0	56.7 60.0	16.7 3.3	3.87 3.60	High
	Item22	0	13.3	40.0	43.3	3.3	3.37	
Exportion	Item22	3.3	10.0	30.0	43.3 46.7	3.3 10.0	3.50	3.6 1 .
Expertise		3.3		20.0	66.7	0	3.50	Moderate
	Item24		10.0					
	Item25	3.3	6.7	26.7	60.0	3.3	3.53	
	Item26	3.3	6.7	23.3	60.0	6.7	3.60	
	Item27	3.3	0	33.3	56.7	6.7	3.63	TT' 1
	Item28	3.3	0	16.7	80.0	0	3.73	High
	Item29	3.3	6.7	30.0	60.0	0	3.47	Moderate
F 6	Item30	6.7	13.3	36.7	40.0	3.3	3.20	TT' 1
Enforcement	Item31	10.0	0	13.3	53.3	23.3	3.80	High
Style	Item32	13.3	10.0	43.3	30.0	3.3	3.00	
	Item33	10.0	3.3	20.0	53.3	13.3	3.57	
	Item34	16.7	16.7	40.0	20.0	6.7	2.83	
Attitude	Item35	10.0	26.7	36.7	23.3	3.3	2.83	
	Item36	0	16.7	46.7	30.0	6.7	3.27	
	Item37	6.7	33.3	36.7	20.0	3.3	2.80	Moderate
	Item38	10.0	20.0	40.0	26.7	3.3	2.93	
	Item39	6.7	16.7	40.0	23.3	13.3	3.20	
	Item40	0	20.0	26.7	46.7	6.7	3.40	
	Item41	0	6.7	50.0	40.0	3.3	3.40	
	Item42	10.0	13.3	53.3	23.3	0	2.90	
	Item43	6.7	23.3	60.0	10.0	0	2.73	
	Item44	0	10.0	26.7	50.0	13.3	3.67	High
External Factors	Item45	3.3	6.7	56.7	23.3	10.0	3.30	Moderate
	Item46	0	13.3	66.7	13.3	6.7	3.13	
	1011110	J	13.3	00.7	13.3	0.7	٥.1٠	

^{*}SD:Strongly disagree; D:Disagree; N:Neutral; A:Agree; SA: Strongly Agree

Min score are represented by Low (1-2.33), Moderate (2.34-3.66) and High (3.67-5.00) [14]. There are 11 min which score High. The rest are Moderate and there is no Low min score.

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3.1. Exploratory Factor Analysis (EFA)

EFA is used to reduce data by reducing numbers of item to a few factors [15]. It can also be used to determine whether items being analyzed show the same construct or forming new factors [16]. Every variable of the same factor is carefully studied and labelled accordingly. Table 7 shows the descriptions of the factors that have been identified.

Table 7. Exploratory factor analysis results.

Factor	Description	No. of Items
1	Knowledge, understanding and expertise in	13
	investigation and preparation of investigation paper (IP).	
2	Attitudes towards investigation and preparation of	8
	IP.	
3	Availability of records and database.	6
4	Availability of procedures and equipment.	4
5	Knowledge in OSH acts and regulations.	2
6	Steadiness of OSH laws.	3
7	Coaching (compliance support) approach.	4
8	Courses and other related laws.	2
9	Relation and communication with external party.	2
10	Tolerance with employers.	2

Table 7 show the ranking of factors in influencing enforcement officers in using punitive action when carrying out their enforcement activities.

4. Conclusion

In conclusion, the respondents generally supportive in imposing punitive action against errand employers. The enforcement factors that influence the most in this action is knowledge, understanding and expertise in carrying out investigation and preparation of IP, followed by officers' attitude towards carrying out inspection and preparing IP and readiness of records and database.

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