

MEDIATING EFFECTS OF WORKERS' ATTITUDE ON RELATIONSHIP BETWEEN OSHMS AND OSH CULTURE: CONSTRUCTION INDUSTRY IN SARAWAK

Giall J. Banan¹, Shamsul B.S.² and Sharija Che Shaari³

1 Faculty of Business, Economics and Accountancy (UMS) Malaysia. (E-mail:gialljohnbanan@gmail.com)

2 Faculty of Medical and Health Sciences (UMS) Malaysia. (E-mail:shamsul@ums.edu.my)

3 Faculty of Business, Economics and Accountancy (UMS) Malaysia. (E-mail:scslaw2012@gmail.com)

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Abstract: *This study aims to examine the mediating effects of workers' attitude on a relationship between OSHMS and OSH culture in the construction industry in Sarawak. The accident in the industry is a major contributor to the accident's statistics. The Malaysian government is serious in preventing the accidents in the construction industry including in Sarawak. Both authorities such as DOSH and CIDB are responsible to monitor the development of the construction industry including the OSH implementation in the workplace. DOSH is providing a free service to construction player in terms of legislative compliance including the implementation of OSHMS, and CIDB is controlling the industry development by registering all construction workers. CIDB is also providing site safety induction to the construction workers in order to create safety awareness for workers. However, the number of accidents reported is quite alarming. It is believed that the occurrence of an accident is due to the attitude of the workers towards OSHMS. Adopting the positivism approach, five points Likert scale questionnaires have been distributed to five ongoing construction sites in the city of Kuching and two in Bintulu. There were 365 respondents participating in this study. Some scholars agreed that attitude is a predictor to the behaviour of the unsafe act. The findings showed that the mediation effect of workers' attitude only occurred on the safety training and site safety inspection. It shows that the workers' attitude towards the implementation of OSHMS in the workplace is poor. Thus, reflects the situation in the industry in Sarawak is actually experiencing poor OSH culture. Poor workers' attitude was influenced by several factors such as the respondent's education level, the origin of the respondents, the number of working experiences, the type and frequency of safety training attended by the respondents, and the commitment of the management themselves. This study verifies that one of the factors influence poor OSH culture in the construction industry in Sarawak is due to the poor workers' attitude toward OSHMS in the workplace.*

Keywords: *Attitude, Occupational safety and health management system (OSHMS), OSH culture.*

Introduction

The Construction industry is important in contributing to the growth of the country's GDP. The industry is also crucial in developing the infrastructure in the country and providing a working opportunity to Malaysians. However, construction job is the most dangerous industry (Bhattacharjee and Gosh, 2011), and it contributed most of the accidents involving death compared to other sectors (Rosenfeld et al. 2006) that makes construction works is one of the most dangerous industry in developing countries (Alhajeri 2011). The work in the construction site is known as 3D works – dirty, difficult, and dangerous, therefore, it becomes the unpopular works among the Malaysians.

The Department of Occupational Safety and Health (DOSH) Malaysia, Sarawak has recorded occupational accident for construction alone in 2013 with 40 death cases, permanent disability were 38 cases, and non-permanent disability were 350 cases. 2014, the accident cases have been reported were 28 cases, permanent disability were 27 cases, and non-permanent disability were 377 cases. 2015 there were 36 accident cases that involving death, 18 cases involving permanent disability and 252 serious cases involving none-permanent disability. 2016 there were 42 accidents that involved death, 17 cases involving permanent disability, and 347 accident cases serious accident involving non-disability. The accident recorded until the end of July 2017, there were 20 accident cases that involving death, 4 cases involving permanent disability, and 220 accident cases involving non-permanent disability (www.dosh.gov.my). The OSH situation in the industry seemed no availed after all the efforts done by the authorities such as DOSH and CIDB including the industry players. The occupational accident keeps on occurring in the construction sites. The industry keeps on losing skills workers due to occupational accidents.

The accident in the construction site normally associated with the OSH culture that practised by the industry players and the OSH culture is a reflection of the workers' attitude. However, there was no official written evidence pertaining to the status of OSH culture of the construction industry in Sarawak. Therefore, it was appropriate to ascertain the OSH culture in the construction industry in Sarawak by examining the mediation effect of the workers' attitude. According to Donald and Carter (1994), workers' attitude and occupational accident are strongly correlated, and Zou et al. (2007), mentioned that workers' attitude is crucial in shaping good OSH culture in the workplace. A Behaviour is the product of the attitude, and normally accident occurs due to the unsafe behaviour that performs by the workers (Yakubu & Bakr 2012, Dumrak et al. 2013, Albert et al. 2014).

Objectives of the study

The objectives of this study were to examine the mediation effect of workers' attitude between OSHMS elements such as OSH policy, hazards identification, risk assessment, and risks control (HIRARC), role and responsibility, safety training, site inspection, and the management review and OSH culture. Another objective was to ascertain the direct effect between workers' attitude and OSH culture.

Literature Review

The construction works are a risky, complex and lengthy process. It involves several phases such as cost, quality and OSH. The accident could result in not only direct physical injury to persons or damage to property, in short-term and long-term effects on the company, society and eventually nation.

Domino theory the accident causation model by Heinrich (1963), mentioned that 88 per cent of the accident occurred was due to unsafe act perform by the workers, 10 per cent was due to management failure, and 2 per cent was the act of God.

The Swiss Cheese model by Reason (1990), mentioned that the occurrence of the accident in the workplace was due to the active and latent failure. The active failure was the errors performed by the front-liner or the workers who involve directly with the activities. The latent failure was the failure of the management to provide safe work procedures.

A study by Abdelhamid and Everett (2000) found the unsafe condition and unsafe working attitudes (workers deciding to work in dangerous conditions) to be the major causes of construction accidents (Li et al. 2015). A study by Hosseinian & Torghabeh, Yakubu et al. (2012), Yakubu and Bakr (2014, 2015), Mousavi et al. (2014), Abas (2015), mentioned that most of the accident in the construction sites were due to the unsafe act of the workers.

Therefore, a proper OSHMS is needed to manage the OSH issues in the workplace. To ensure OSH issues are tackled systematically, DOSH and CIDB have joined forces to ensure the industry players are complying with OSH Act 1994 (Act 514) and CIDB Act 1994 (Act 520), and also to ensure the industry players are implementing the proper occupational safety and health management system (OSHMS). Proper OSHMS such as OHSAS 18001 and MS 1722 and enforcing the OSH Act would be able to influence and enhance the workers' attitude and behaviour (Vinodkumar and Bhasi 2010, Choudhry 2014), thus create good OSH culture Fernandez-Muniz et al. (2007).

OSH performance is always associated with the OSH culture. According to Shamsul and Roslan (2015), the OSH culture of an organization represents the shared value, beliefs, attitudes, norms, social and technical practices of employees and management, roles that are concerned with minimizing the exposure of employees, managers, customers and members of the public to conditions considered dangerous or injuries. Good OSH culture can be seen through manifestation of the workers practices, alertness toward unfamiliar hazards and help for help, use available information to improve OSH performance, the workers will be rewarded for their active participation, and bringing others to learn how to work in a safe manner (Ostrom et al. 1993, Shamsul and Roslan 2015). Zou et al. 2007 mentioned the importance of shaping the workers' perception and attitude toward OSH, however, he did not mention how to shape the workers' perception and attitude toward OSH.

Worker's attitude is important in shaping good OSH culture in the workplace (Zou et al. 2007) and improve the overall OSH performance of the organisation (Zanko and Dowson 2012). Workers' attitude and occupational accident are strongly correlated (Donald and Carter 1994). In order to change human behaviour first need to change the attitude (Geller 1998). Because attitude consists of belief, feelings, and intention to act. The workers will observe OSHMS closely if he or she believes that OSHMS is implemented so that the workers are protected from the occupational accidents and injuries. Otherwise, the workers will ignore the implementation of OSHMS in the workplace. In other words, the person with negative attitudes toward OSHMS will always decide to behave unsafely.

The study by Diaz and Cabrera (1997), has supported the association of safety attitudes and the OSH culture, and the study stated that the attitudes are a better predictor of OSH culture than vice versa. A study by Abdul Rahim et al. (2008), found that one of the reasons the occupational accident occurred in the construction sites was the poor attitude toward OSH in the workplace.

The finding of this study is similar to the findings of the study by Abdul Rahim et al. (2008) where the poor attitude is one of the causes of accident causation and thus, reflecting the poor OSH culture in the industry. Attitude is seen as a mediator between the OSHMS and the OSH culture. This is crucial in the design of any attempts to improve OSH performance through attitudinal change. Changing human behaviour requires changing their attitudes and belief (Lingard and Rowlinson 2005, Shamsul H. M and Roslan A 2015). The effect of mediation of workers' attitude is crucial on the relationship between OSHMS implementation and OSH culture in the workplace. workers' attitude could influence the successfulness of the implementation of OSHMS in the workplace and resulted either good OSH culture or vice versa.

Research Methodology

This research was adopting the positivism approach and quantitative method. The sample size was determined by G power statistical tool. The data analysis was using the Partial Least Square (PLS) 3.0 version. The G power suggested the sample size was 337 in order to reach 95 per cent of the total sample size. However, the final sets of questionnaires which were completed and could be used and analysed were 365 in total (N=365).

Five-point Likert scale was used for each item where 1=strongly disagree, 5 = strongly agree. The self-administered questionnaires have been distributed to five ongoing construction sites in the City of Kuching and two in Bintulu. The target population for the sampling of this study was the construction workers except for the management level. The questionnaire was developed in four sections, namely socio-demographic (6 questions), OSHMS elements such as OSH policy (five questions), hazard identification, risk assessment, and risk control (HIRARC) (five questions), role and responsibility (five questions), safety training (five questions), site inspection (five questions), and management review (five questions), attitude (five questions), and OSH culture (six questions). The variables for OSHMS elements were referred to the OHSAS 18001, the attitude and the OSH culture were from the relevant literature review. The development of the hypothesis was from the relevant literature review.

All the data analysis was analysed using Partial Least Square (PLS 3.0). There were two model analysis has been done namely measurement model analysis and structural model analysis. The measurement model analysis included 1. Internal consistency reliability of the data, 2. Indicator reliability (outer loading). The internal consistency would be examining the composite reliability (CR). The value of CR must be higher or equal to 0.7-0.9. The outer loading would be examined the average extracted variance (AVE). The purpose of examining the AVE was to ensure the consistency of the indicators that intended to measure. The score of AVE should be greater than 0.5 (Hulland 1999, Byrne 2016). The AVE scores were also used to measure the convergent validity and the score value $AVE \geq 0.50$ (Hair et al. 2017). Another measurement that has been analysed was the discriminant validity. In measuring the discriminant validity, it needs to look at the cross-loading score, Fornell & Larcker criterion, and Heterotrait-Monotrait (HTMT) ratio criterion and the value score would be 0.85 (Kline 2011, Hanseler, Ringle, and Sarstedt 2015).

The structural analysis would include the collinearity analysis. The purpose of examining the collinearity score was to ensure the indicators were not inter-changeable to avoid any issue in the bootstrapping procedure. Collinearity is normally used in the formative measurement model. The score of variance inflation factor (VIF) must be 3.3 or below (Diamantopoulos & Siguaw 2006) or VIF below 5 (Hair, Ringle, & Sarstedt 2011). If the VIF higher than 5, it indicates a potential issue with the collinearity problem (Hair, Ringle, & Sarstedt 2011).

Research hypothesis

1. There is a positive mediation effect of workers’ attitude between OSHMS element (OSH policy) and the OSH culture.
2. There is a positive mediation effect of workers’ attitude between OSHMS element (HIRARC) and OSH culture.
3. There is a positive mediation effect of workers’ attitude between OSHMS element (role and responsibility) and OSH safety culture.
4. There is a positive mediation effect of OSHMS element (safety training) and OSH culture.
5. There is a positive mediation effect of workers’ attitude between OSHMS element (site inspection) and OSH culture.
6. There is a positive mediation effect of workers’ attitude between OSHMS element (management review) and OSH culture.
7. There is a direct effect of workers’ attitude on OSH culture.

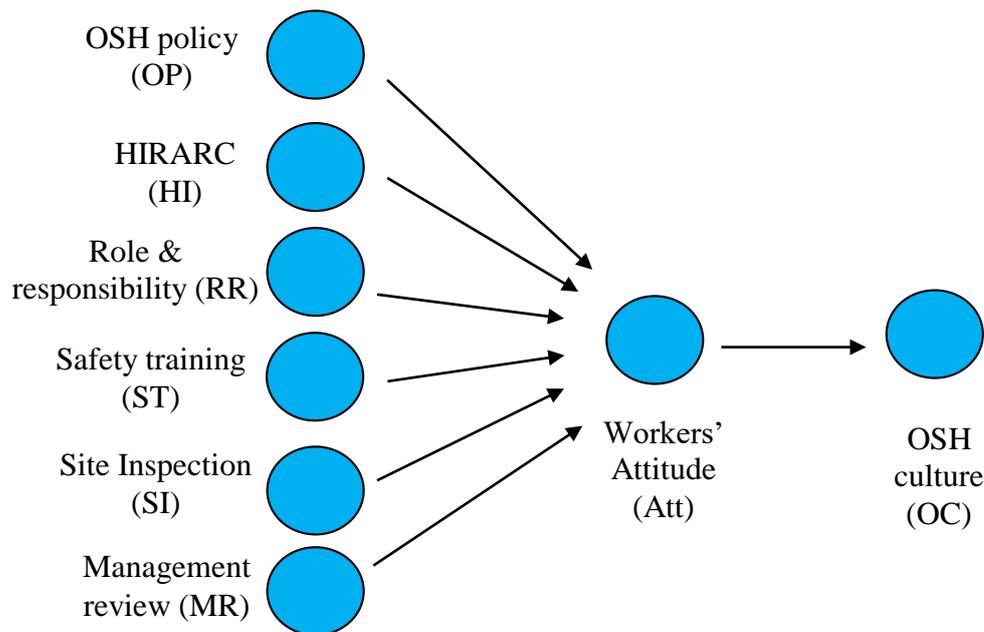


Figure 1. Research Model

Results

This part presenting the results of demographic data analysis and the research model analysis including the measurement model analysis and the hypothesis test result.

Demographic result

Table 1: Distribution of Socio-Demographic (N=365)

Characteristic	N	%
Age 16 - 19	11	3
20 - 24	51	14
25 - 29	77	21
30 - 34	71	20
35 - 39	75	21
40 - 44	40	11
45 - 49	19	5

	50 - 54	12	3
	55 - 59	4	1
	60 - 65	3	1
Work experience	1 - 5 years	162	47
	6 - 10 years	107	31
	11 - 15 years	34	10
	16 - 20 years	22	6
	21 - 25 years	9	2
	26 - 30 years	9	2
	31 - 35 years	3	1
	36 - 40 years	1	0
Nationality	Indonesian	193	53
	Malaysian	166	45
	Bangladesh	6	2
Education level	Primary level	230	65
	Secondary level	135	37
Training attended	Green card (CIDB)	152	14
	Working at height	114	11
	PPE compliance	202	19
	First Aid	46	4
	Site safety induction	224	21
	Emergency response plan (ERP)	64	6
		48	5
	Electrical safety	96	9
	Fire Safety	23	2
	Confined Space	50	5
	Heavy Lifting	42	4
		Manual lifting	
Workers' trade	Scaffolds erector	36	9
	Carpenter	62	15
	Painter	23	6
	Tiler	19	5
	Air-con installer	18	4
	Water proofing	2	0
	Brick layer	40	10
	Plasterer	10	2
	Bar bender	13	3
	Bar installer	24	6
	Plumber	5	1
	Pile crew	2	0
	General workers	115	28
	Crane operators	13	3
	Electrician	7	2
	Roof installer	3	0
	Ceiling installer	6	1
Excavator operator	7	2	

Analysis of research model results.

The analysis continued with the measurement model analysis which three criteria would be assessed namely the internal consistency reliability, convergent validity and discriminant validity.

Table 2: Measurement model analysis

Constructs	Items	Loadings	CR	AVE	R ²
OSH policy	OP1	0.765	0.900	0.644	
	OP2	0.818			
	OP3	0.885			
	OP4	0.868			
	OP5	0.656			
Hazards identification, risks assessment, and risks control (HIRARC)	HI1	0.831	0.835	0.632	
	HI4	0.657			
	HI5	0.889			
Roles & Responsibility	RR1	0.884	0.870	0.628	
	RR2	0.829			
	RR3	0.685			
	RR5	0.741			
Safety training	ST1	0.728	0.834	0.557	
	ST2	0.779			
	ST4	0.745			
	ST5	0.725			
Site inspection	SI1	0.889	0.887	0.725	
	SI2	0.906			
	SI3	0.753			
Management Review	MR4	0.487	0.688	0.552	
	MR5	0.934			
Workers' attitude	Att2	0.811	0.777	0.540	0.085
	Att3	0.639			
	Att4	0.744			
Osh culture	OC1	0.582	0.848	0.587	0.214
	OC3	0.826			
	OC4	0.760			
	OC5	0.868			

Internal consistency reliability.

The internal consistency was determined by assessing composite reliability instead of assessing the Cronbach's alpha. The accepted values for the composite reliability was greater than 0.60 (Ramayah 2018, Hair *et al.* 2017). Table 2 showed the values of CR were greater than 0.6 and equal to 0.9 which indicated the internal consistency reliability of the constructs.

Convergent validity

The convergent validity obtained by assessing the values of the average extracted variance (AVE) (see table 2). Each construct should reach for at least 50 per cent of the assigned indicators' variance ($AVE \geq 0.50$) (Bagozzi and Yi, 1988; Fornell and Larcker, 1981; Hair *et al.* 2017). The lowest values including the negative values were deleted one by one (Henseler, Ringle, and Sinkovics, 2009) until the composite reliability and the AVE values reached satisfactory values (Henseler *et al.* 2009) The deletion of the indicator must not more than 20

per cent (Hair, Babin, and Krey, 2017). Table 2 showed that the values of CR and AVE were greater than 0.50 and that indicated the convergent validity was established.

Discriminant validity

The outer loadings were shown in table 3 showed that all loading scores were highly loaded on their respective constructs. There was no issue of high cross-loading among one another. This indicated the discriminant validity between the constructs has established and there was no issue of high cross-loading among the construct.

Table 3: Discriminant validity test - cross loadings results

Construct	Item	Att	HI	MR	SI	OC	OP	RR	ST
Management review (MR)	MR4	0.054	-0.031	0.487	-0.028	0.057	-0.03	0.109	0.132
	MR5	0.133	-0.047	0.934	-0.018	0.165	0.235	-0.043	0.254
Workers' attitude (Att)	Att2	0.811	0.142	0.122	-0.062	0.261	0.172	0.216	0.155
	Att3	0.639	-0.02	0.103	-0.026	0.107	0.057	-0.006	0.198
	Att4	0.744	0.08	0.079	-0.133	0.194	0.049	0.067	0.201
OSH Culture (OC)	OC1	0.180	0.048	0.195	-0.193	0.582	0.165	0.191	0.167
	OC3	0.243	0.122	0.058	-0.127	0.826	0.206	0.24	0.295
	OC4	0.164	-0.100	0.126	-0.106	0.760	0.146	0.042	0.251
	OC5	0.229	0.036	0.151	-0.137	0.868	0.129	0.131	0.271
HIRARC (HI)	HI2	0.095	0.831	-0.07	0.14	0.080	0.037	0.328	0.099
	HI4	0.043	0.657	-0.088	0.038	0.001	0.099	0.325	0.095
	HI5	0.112	0.889	-0.004	0.058	0.020	0.127	0.482	0.107
Site Inspection (SI)	SI1	-0.094	0.143	-0.022	0.889	-0.164	-0.075	-0.074	-0.084
	SI2	-0.091	0.069	-0.029	0.906	-0.182	-0.059	-0.078	-0.109
	SI3	-0.081	0.048	-0.014	0.753	-0.115	0.018	-0.076	-0.057
OSH policy (OP)	OP1	0.105	0.202	0.123	-0.070	0.199	0.765	0.261	0.151
	OP2	0.078	0.134	0.139	-0.061	0.271	0.818	0.238	0.168
	OP3	0.112	0.062	0.185	-0.059	0.152	0.885	0.032	0.237
	OP4	0.141	0.099	0.147	-0.055	0.16	0.868	0.089	0.197
	OP5	0.102	-0.065	0.196	0.053	0.098	0.656	-0.067	0.274
Role & Responsibility (RR)	RR1	0.169	0.563	0.000	-0.067	0.154	0.098	0.884	0.154
	RR2	0.091	0.406	0.009	-0.092	0.202	0.106	0.829	0.168
	RR3	0.077	0.185	-0.014	-0.095	0.215	0.053	0.685	-0.007
	RR5	0.116	0.241	0.008	-0.046	0.122	0.139	0.741	0.177
Safety Training (ST)	ST1	0.152	0.066	0.189	-0.08	0.321	0.219	0.073	0.728
	ST2	0.155	0.067	0.206	-0.072	0.222	0.200	0.145	0.779
	ST4	0.199	0.159	0.172	-0.057	0.181	0.150	0.166	0.745
	ST5	0.198	0.061	0.239	-0.085	0.260	0.204	0.108	0.725

Another method of assessing the discriminant validity is by assessing the Fornell-Larcker's criterion. Table 4 showed the Fornell-Larcker's criterion, where all values or the square root of AVE on the diagonal were higher than the correlation on the off-diagonal. Based on Fornell-Larcker's criterion result it indicated that discriminant validity was established.

Table 4: Discriminant validity test - Fornell-Larcker Critirion

	Att	HI	MR	SI	OC	OP	RR	ST
Att	0.735							
HI	0.113	0.799						
MR	0.137	-0.053	0.745					
SI	-0.104	0.104	-0.026	0.852				
OC	0.272	0.048	0.166	-0.182	0.767			
OP	0.139	0.106	0.197	-0.048	0.212	0.803		
RR	0.155	0.479	0.002	-0.089	0.206	0.128	0.789	
ST	0.241	0.123	0.272	-0.099	0.326	0.257	0.168	0.745

The last test of determining the determinant validity was by assessing the HTMT values. Table 5 showed that the values of the HTMT ratio were lower than the required threshold value of HTMT 0.85 (Kline 2011) and HTMT 0.90 (Gold *et al.* 2001), that indicated the discriminant validity was established.

Table 5: Discriminant validity test - Heterotrait-Monotrait (HTMT) ratio

Construct	Att	HI	MR	SI	SC	OP	RR
Att							
HI	0.180						
MR	0.329	0.158					
SI	0.168	0.128	0.066				
OC	0.373	0.138	0.353	0.235			
OP	0.183	0.178	0.375	0.107	0.273		
RR	0.186	0.568	0.217	0.118	0.273	0.198	
ST	0.371	0.191	0.597	0.127	0.437	0.326	0.217

Hypothesis testing

The hypothesis test is to show the mediation effect of workers' attitude in a relationship between the OSHMS and OSH culture. Table 6 is showing the hypothesis testing result by performing the bootstrapping procedure.

Table 6: Hypothesis testing (Bootstrapping procedure)

Hypothesis	Relation ship	Std. β	Std. error	T value	P Value	Bc value	LL	UL	Decision
H1	OP -> Att -> OC	0.057	0.066	0.998	0.318	0.004	-0.028	0.043	Not supported
H2	HI -> Att -> OC	0.059	0.070	0.838	0.402	0.005	-0.052	0.045	Not supported
H3	RR -> Att -> OC	0.022	0.061	1.359	0.174	0.002	-0.011	0.059	Not supported
H4	ST -> Att -> OC	0.176	0.061	2.881	0.004	0.003	0.012	0.093	Supported

H5	SI								
	-> Att	-	0.031	2.691	0.007	-	-0.038	-	Supported
	-> OC	0.081				0.004		0.007	
H6	MR								Not supported
	-> Att	0.079	0.051	1.559	0.119	0.005	-0.010	0.049	
	-> OC								
H7	Att								Supported
	-> OC	0.272	0.061	5.257	0.001	0.012	0.115	0.360	

Discussion of findings

The hypothesis testing result showed that the mediation effect of workers' attitude was only occurred between safety training (H4) and site inspection (H5) and OSH culture. However, there was a weak mediation effect of workers' attitude between OSH policy (H1), HIRARC (H2), role and responsibility (H3), management review (H6) and Osh culture. The findings also ascertained that there was a direct effect of the workers' attitude and OSH culture (H7). This study has revealed that the workers' attitude toward OSHSM in the workplace was poor. The finding of this study is similar to the findings of the study by Abdul Rahim *et al.* (2008) where poor attitude is one of the causes of accident causation and thus, reflecting the poor OSH culture in the industry. The workers did not believe in the OSHMS that implemented by the management, they felt that the OSHMS was not able to protect them from the work-related accident, thus led them for not to observe the OSH procedures and performed the unsafe behaviour. There were several factors that influence the mediation effect of the workers' attitude on relationship between OSHMS and OSH culture such as the age of the respondents, the education level of the respondents, the origin of the respondents, the number of working experiences of respondents, the commitment of management themselves.

Age factor

Sociodemographic data showed that most respondents age were between 25 – 29 where it was 77 per cent of total respondents. With this range of age showed that the industry was dominated with the young workers. This rage of ages was having all kind of perception that influences the attitude toward OSHMS in the workplace, for example, macho image and risk-taking behaviour.

Education factor

It was about 230 respondents or it was 65 per cent of respondents were only attended primary school level. This situation where more than half of the respondents did not attend the secondary school level. Educated workers are likely to understand the safety and health in the workplace better. A study by Gyekye and Salminen (2009) found that there was a positive association between education and safety perception and most compliant with the safety procedures and recorded the lowest accident involvement rate. The education level of the respondents may influence the attitude of the workers, thus, influence the result of this research.

Nationality factor

The brought up of the person plays an important role in safety and health in the workplace. Malaysia as a developed country is very concerned about the safety and health of workers in the workplace regardless of the industry. Therefore, CIDB is providing site safety induction to all construction personnel to enhance their knowledge of safety and health in the workplace and also the country's OSH legislation requirement. However, examining the socio-demographic data the respondents of this research were dominated by Indonesian workers where 193 respondents or 53 per cent of the total respondents were Indonesian. The Indonesian

workers are not familiar with Malaysia OSH legislation requirement and practices. This situation may influence the attitude of workers and thus influence the result of this research.

Number of working experiences factor

The number of working experiences of the respondents is may also influence the finding of this research. The finding showed that the respondents were dominated by the young workers where their number of experiences working in construction sites was less than five years even though some of them were having work experience more than that but less than ten years. Though the respondents were having such experience probably they were working in the small projects which had no proper OSHMS. This situation also can influence their attitude and behaviour of the young workers in the workplace, thus influence the workers' attitude and also the OSH culture.

Management commitment factors

Management commitment is crucial in influencing workers' attitude and behaviour. The socio-demographic data showed that there were only 152 respondents or only 14 per cent registered with CIDB and attended the construction site safety induction training. In CIDBA 1994 (Act 520) stipulated that all construction personnel shall be registered with CIDB and shall attend the construction site safety induction training organise by CIDB. This situation showed the management commitment toward complying the country's legislation was quite low. Though most of the construction companies provide in-house safety training such as site safety induction training it is important for the companies to register their personnel to CIDB as their effort to comply with the OSH legislation. Otherwise, the government cannot keep the record of construction workers including the foreign workers.

Conclusion

It is obvious that the workers' attitude does influence the establishment of the OSH culture in the industry. As a conclusion to improve the situation in the industry, the researcher recommends that the discussion needs to be established with the neighbouring countries where their people involved with the construction industry in Malaysia. The matter that can be discussed are;

1. Those workers, especially from the neighbouring or foreign countries, shall be trained first in their origin country pertaining to OSH practices and legislation in Malaysia that they need to comply with before they are allowed to come and work in Malaysia. This is to get the foreign workers to be ready before they are employed in Malaysia. G2G discussion needs to be established;
2. The industry shall do the screening of the workers especially from the neighbouring country before they are employed to ensure they have received proper OSH training in their own country;
3. The OSH legislation shall be tightened with higher penalty amount to those contractors who do not register their workers with CIDB, including the foreign workers and send them to the construction site safety induction organised by CIDB or simply known as green card training;
4. Construction site audit needs to be done more frequent by the authorities to ensure the OSHMS is implemented with full commitment from the management of the construction players;
5. Reward and punishment need to be implemented in order to motivate industry players and workers to participate actively in the implementation of the OSHMS in the workplace.

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