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COMPETENCY OF SAFETY AND HEALTH COMMITTEES: CURRENT REALITIES AND THE WAY FORWARD

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Abstract

The purpose of this paper is to discover the state of competency of occupational safety and health committees (OSHCs) and its influence on effective OSHCs in Malaysia. Using survey data from 231 manufacturing firms, the study empirically examined the influence of both competency of OSHCs and that of scope of OSHCs on the perceived effectiveness of OSHCs, and the relationships among these three variables. Respondents of the survey method, who were members of OSHCs, perceived all three variables at the medium level. Findings also confirm that scope of OSHCs partially mediates the relationship between the other two variables. This paper provides suggestions on how competency of OSHCs can be improved.

Keywords

Employee Involvement, Laws, Safety Committees, Workplace, Self-Regulation, Empowerment

1. Introduction

Workplaces are the source of safety and health hazards that affect the physical and physiological well-being of employees. Hence, the traditional approach to managing

occupational safety and health (OSH) at the workplace was via the 'command and control' approach that was dependent upon a governmental agency to promulgate and enforce OSH related laws. This approach was found wanting when some countries made the transition into an industrial based economy that brought in its wake work environments that exhibited varied and evolving types of hazards; because the governmental agency was unable to legislatively keep abreast with the changing nature of hazards, simultaneously being hampered by financial and human resources constraints in enforcing them. Thus, many countries introduced Robens' type legislation (e.g. Australia, New Zealand and Malaysia) that replaced the traditional approach with the OSH 'self-regulation' approach.

Central to this new approach are two key principles: employee involvement and the joint commitment of employers and employees (Levinson, 1987). Occupational safety and health committees (OSHCs),comprising management and non-management representatives, enable the implementation of those principles, and are the crux of the OSH 'self-regulation' approach,as they enable persons proximate to workplace hazards to eliminate or abate them.

1.1 Purposes and Significance of the Study

Established OSHCs may be symbolic, prompting researchers, in countries (primarily from the West) that have utilised the OSHC as a public policy approach to manage OSH at the workplace, to determine its effectiveness and the determinants of its effectiveness (Shearn, 2005; Walters, 2010). This study adds to past literature by providing empirical evidence as to the perceived effectiveness of OSHCs in Malaysia manufacturing firms and how both competency and scope of OSHCs influence the former. Hence, this study attempts to answer the following three research questions:RQ1:What is the state of perceived effectiveness, competency and scope of OSHCs?; RQ2:Do both competency and scope of OSHCs influence perception of effectiveness of OSHCs?; RQ3:Does scope of OSHCs mediate the relationship between competency of OSHCs and effectiveness of OSHCs?

The findings are important because Malaysia is moving into the third phase of the OSH Master Plan 2015 (Government of Malaysia, 2005), that spans the years 2016 to 2020, in which a 'systems based' approach that embraces "strategic decision-making and operational action" (Hamalainen, Saarela, & Takala, 2009, p.26) towards OSH is envisioned. This author argues that in the absence of current legislation mandating such an approach, effective OSHCs dependant upon their competency and scope, may lead manufacturing firms voluntarily to its adoption.

1.2 Literature Review

In Malaysia section 30 of the Occupational Safety and Health Act 1994 (OSHA 1994) mandates the establishment of OSHCs in workplaces with 40 or more employees; and some provisions within it and the Occupational Safety and Health (Safety and Health Committee) Regulations 1996 (SHCR 1996), shape the competency and functioning of OSHCs.

1.2.1 Effectiveness of OSHCs

Effectiveness of OSHCs can be measured using accident/injury statistics or perceptual measures. The former measure is more suited for a logitudinal study (Hoonakker et al., 2005), prone to underreporting (Wai, 2007) and captures only the reactive ability of an OSHC (e.g. to prevent the reoccurence of an accident/injury). As for perceptual measures their utilisation can be varied. Eaton and Nocerino's (2000) perceptual measures of effective OSHCs, in contrast to Boden, Hall, Levenstein, and Punnett (1984) wherein perceptual measures focused on the internal dynamics of the committee (e.g. perceived group cohesiveness and commitment of committee members), considered the abilities of an effective committee along five areas to improve workplace safety and health (e.g. proactive, reactive, educative, productivity and change). The perceptual measures used in Eaton and Nocerino (2000) capture the ends of an OSHC as opposed to the latter study that capture the means towards their ends.

A proactive role, unlike a reactive role that necessitates a remedial response, is preemptive in nature. Hence, an OSHC must be able to foresee safety and health issues and act accordingly before the incident occurs. The OSHC, representative of employees, has to be able to educate management and non-management members alike at the workplace about safety and health issues; and consider how the promotion of safety and health issues can enhance productivity and reduce costs. Lastly, the OSHC, as a representative institution, should have the ability to transform work processes/practices, equipment/materials and substances/chemicals prevalent at the workplace especially when safety and health hazards are inherent within them.

1.2.2 Competency of OSHCs

In Malaysia, a duty has been legislatively imposed on employers, to ensure that members of an OSHC are competent in executing their legislative functions (Part V, SHCR 1996). These provisions emphasise competency in legal (e.g. OSH laws), technical (e.g. hazard recognition and prevention, industrial hygiene, OSH inspections) and committee process matters (e.g. problem-solving, management of committee). Knowledge in committee process matters is

important to enableco-management between employers' and employees' representatives respectively at the workplace in terms of risk identification and resolution.

1.2.3 Scope of OSHCs

In Malaysia, members of an OSHC must be able to execute their legislatively prescribed functions (section 31 OSHA 1994, Part III SHCR 1996). These functions are the means that need to be undertaken so that an OSHC can achieve its ends (see 1.3.1 above). They cover these areas: inspective, investigative, review (e.g. of technology,systems and internal information), collection and assessment of information, liaising with safety inspector, and educative.

1.3 Research Hypotheses

Based on the literature above, the following hypotheses are advanced in the context of Malaysian manufacturing firms:

H_1: Competency of OSHCs has a significant positive association with effectiveness of OSHCs.

H_2: Scope of OSHCs has a significant positive association with effectiveness of OSHCs.

H_3: Scope of OSHCs mediates the relationship between competency of OSHCs and effectiveness of OSHCs.

2. Research Method

The model of the present study comprised two independent variables: competency and scope of OSHCs, because of their relative influence on the effectiveness of OSHCs, the dependent variable of interest. In the model, scope of OSHCs was also postulated to have a mediating effect on the relationship between competency of OSHCs and the dependant variable.

2.1 Population and Sample

A target sample of 1,000 manufacturing firms, were drawn via the proportionate systematic stratified random sampling method, from a sampling frame comprising 4,337 manufacturing firms with established OSHCs, reclassified into 15 manufacturing sub-sectors, and registered with DOSH as of 3rd September 2008, because a significant proportion of accidents and work-related diseases originate from the manufacturing workplace (Social Security Organization, 2010).

An OSHC established at a manufacturing workplace must comprise at the very least an equal number of member representatives of management and non-management employees respectively (Regulation 5, SHCR 1996). A survey package comprising a cover letter and two

identical questionnaires was mailed to the Safety Manager/Safety Officer/Safety Executive of the targeted sample of 1,000 firms.Responses were solicited from both types of OSHC members because past research (Granzow & Theberge, 2009; Ostry & Yassi, 2004) is inconclusive as to whether type of member could affect the responses to the questionnaire.

As of February 2010, 196 and 82 questionnaires completed by management and non-management representatives respectively were usable for data analysis.The sample of n=278 comprised two subsamples that were subsequently merged, as the results of the independent-samples t-test, after removal of five extreme outliers from the data set (n=273), suggested no significant statistical difference in the mean scores for management and non-management respondents respectively, across the three variables in the study's model, as p values were more than 0.05. Thereafter, 42 cases (comprising responses from non-management representatives) were removed because 42 pairs of management and non-management representatives' responses originated from the same firm. Hence, the final sample size was reduced to n=231.

2.2 Instrument and Measurement

The research instrument used in the study was the questionnaire. Multi-item scales were used to measure the three variables in the study's model.In analysing the results of the said variables, the mean responses between 3 and 4 were considered medium; those between 1 and 3 were considered low; and those between 4 and 5 were considered high.

2.2.1 Dependent Variable- Effectiveness of OSHCs

The 12 items used in Eaton and Nocerino (2000) to measure perceived effectiveness of OSHCs were adapted for use in this study. The variable was operationalised along the OSHC's perceived ability to effect changes in four ways: (i) prevent the reoccurrence of safety, health and environmental hazards; (ii) prevent the occurrence of potential safety, health and environmental hazards; (iii) improve OSH knowledge among employees, overall productivity and reduce cost and; (iv) change work practices, equipment and substances. The respondents were asked to rate the abilites of their OSHCs in the past 12 months on a Likert scale of 1 to 5 (from 1=poor to 5= excellent).

2.2.2 Independent Variable-Competency of OSHCs

The variable competency of OSHCs was measured using a multi-item scale comprising 6 items adapted from Eaton and Nocerino (2000) that measured competency of OSHCs in terms of their legal, technical and committee process knowledge. The respondents were asked to rate their

provision of training in those areas in the past 12 months on a Likert scale of 1 to 5 (from 1=none to 5= always).

2.2.3 Independent Variable-Scope of OSHCs

The variable scope of OSHCs was measured using a multi-item scale comprising 12 items adapted from Eaton and Nocerino (2000). The scale measured scope of OSHCs in terms of their operational, information gathering, review and educative functions. The respondents were asked to rate whether their OSHCs executed the said functions in the past 12 months on a Likert scale of 1 to 5 (from 1=none to 5= always).

2.2.4 Control Variables -Financial Health, Size of Firm and Type of Firm

Financial health, type and size of firm were treated as control variables in this study. Past research evidences a positive relationship between the first two variables and safety performance (Chen & Chan, 2004; Filer & Golbe, 2003), whereas the association between size of firm and effectiveness of OSHCs is inconclusive from past research reviewed (Hall, Forrest, Sears, & Carlan, 2006). A significant majority of the firms in this study are perceived to be in good to excellent financial health (71.4%); and 58% are local in origin. In terms of size of firm based on number of employees (less than 100, 101-200, 201-500, more than 500), the percentage of firms in each category ranges from 32.5% to 34.2%.

3. Data Analysis and Results

Confirmatory factor analysis and reliability analysis were conducted to measure the construct validity and reliability of the three multi-item scales. Descriptive, multiple, simple and hierarchical regression analyses were executed to answer the research questions (refer to section 1.2) and test the hypotheses (refer to section 1.4) generated for this study. All analyses were conducted using the SPSS 17.0 software or IBM SPSS AMOS version 22 softwares.

3.1 Confirmatory Factor Analysis and Reliability Analysis

The Comparative Fit Index (CFI) of the three multi-item scales measuringthe independent and dependant variables were above 0.95 evidencingtheir strong unidimensionality (Hu & Bentler, 1995). Furthermore, the internal consistency of these scales was significant as their Cronbach alpha values were above 0.6 (Hair, Anderson, Tatham, & Black, 1998). Hence, with reference to the items used to measure these three variables, and shown in Tables 1, 2 and 3, the saidscales satisfied the tests of construct validity and reliability analysis.

3.2 Descriptive Analysis of all Measures

The mean values for all three variables fall on the medium scale (effectiveness of OSHCs=3.54; scope of OSHCs=3.70) with competency of OSHCs registering the lowest mean value (3.18).

3.3 Descriptive Analysis for Effectiveness of OSHCs

The mean and sum scores, suggest that OSHCs are perceived to be at par in terms of their reactive (mean=3.56, sum=823.00) and proactive (mean=3.56, sum=823.33) abilities (Table 1). Their educative and productive ability (mean=3.56, sum=821.67) follows next, with OSHCs being perceived the least effective in terms of their ability to transform work processes/ practices, equipment/materials and substances/chemicals used at the workplace (mean=3.47, sum=802.67).

Table 1: *Descriptive Statistics of Effectiveness of OSHCs in Manufacturing Firms*

Effectiveness of OSHCs (12 items):	Comparative Fit Index=0.99; Cronbach alpha=0.96; Mean=3.54; Std. Dev.=0.66		
	Description of 12 Items	Mean	Std. Dev.
Reactive Ability			
1	Ability of OSHC to Reduce Reoccurrence of Potential Safety Hazard	3.59	0.77
2	Ability of OSHC to Reduce Reoccurrence of Potential Health Hazards	3.56	0.78
3	Ability of OSHC to Reduce Reoccurrence of Potential Environmental Hazards	3.54	0.83
	Mean	3.56	0.75
	Sum=823.00		
	Educative & Productive Ability		
4	Ability to Improve Health and Safety Knowledge Among Management Employees	3.61	0.78
5	Ability to Improve Health and Safety Knowledge Among Non Management Employees	3.54	0.79
6	Ability to Improve in General Productivity and Reducing Costs	3.52	0.78
	Mean	3.56	0.70
	Sum=821.67		
	Proactive Ability		
7	Ability of OSHC to Reduce Potential Safety Hazards	3.58	0.75
8	Ability of OSHC to Reduce Potential Health Hazards	3.58	0.74
9	Ability of OSHC to Reduce Potential Health Environmental Hazards	3.54	0.80
	Mean	3.56	0.71
	Sum=823.33		
	Change Ability		
10	Ability to Change Work Processes or Practices	3.53	0.82
11	Ability to Change Equipment and Materials	3.47	0.82
12	Ability to Change Substances or Chemicals	3.42	0.87

	Mean	3.47	0.75
	Sum=802.67		

3.4 Descriptive Analysis for Competency of OSHCs

The mean score is on the medium scale in all areas of training (Table 2). In terms of technical training, both hazard recognition and prevention (mean=3.33), and inspections training (mean=3.28) have higher mean values than industrial hygiene training (mean=3.08). With respect to non-technical training, training in the areas of committee process (mean=3.10) and problem solving (mean=2.95) is lagging behind training in OSH related laws (mean=3.32).

Table 2: *Descriptive Statistics of Competency of OSHCs in Manufacturing Firms*

Competency of OSHCs (6 items):	Comparative Fit Index=0.99; Cronbach alpha=0.88; Mean=3.18; Std. Dev.=0.87		
Items	Description of 6 Items	Mean	Std. Dev.
	Technical Training		
1	Hazard Recognition and Prevention training	3.33	1.03
2	Inspections Training	3.28	1.07
3	Industrial Hygiene Training	3.08	1.14
	Non-Technical Training		
4	Training in OSHA 1994	3.32	1.13
5	Committee Process Training	3.10	1.11
6	Problem-solving Training	2.95	1.08

3.5 Descriptive Analysis for Scope of OSHCs

Based on mean values (Table 3), these OSHCs' functions are executed relatively better than the others: investigation and review of employees' complaints (mean=4.06), accompanying inspectors during inspections (mean=3.96), having access to employer's safety and health records (mean=3.88), educating non-management employees (mean=3.85), inspection to identify safety hazard (mean=3.85), educating management employees (mean=3.76), inspection to identify health hazard (mean=3.72), and inspection to identify environmental hazard (mean=3.64). The data also evidences that OSHCs are relatively weak in these functions: having access to citations and corrective orders provided by DOSH (mean=3.59), review of occupational health and safety programs, policies and procedures (mean=3.57), information gathering function (mean=3.54) and review of new technology, process or substance (mean=3.34).

Table 3: *Descriptive Statistics of Scope of OSHCs in Manufacturing Firms*

Scope of OSHCs (12 items):	Comparative Fit Index=0.99; Cronbach alpha=0.90; Mean=3.70; Std. Dev.=0.71		
	Description of 12 Items	Mean	Std. Dev.
1	*Investigate and Review Complaints by Employees*	4.06	0.87
2	Accompany Safety and Health Inspectors	3.96	1.15
3	*Access to and Review Employer's Safety and Health Records*	3.88	1.10
4	*Distribute Educational/Training Material to Non-Management Employees*	3.85	1.01
5	*Inspection to Identify Safety Hazard*	3.85	0.90
6	*Distribute Educational/Training Material to Management Employees*	3.76	0.98
7	*Inspection to Identify Health Hazard*	3.72	0.90
8	Inspection to Identify Environmental Hazard	3.64	1.01
9	Access to and Review Citations and Corrective Orders Provided by DOSH*	3.59	1.19
10	*Review the Effectiveness of Management Health and Safety Programs, Policies and procedures*	3.57	1.08
11	*Collect General Information on Safety and Health Issues*	3.54	1.06
12	Review of New Technology, Process, Substance	3.34	1.13

*DOSH: Department of Occupational Safety and Health; Items in italic are legislated for via the SHCR 1996

3.6 Multiple, Hierarchical and Simple Regression Analysis

The results of the multiple regression analysis evidence an absence of multicollinearity, based on the Tolerance and Variance Inflation values of 0.573 (more than 0.10) and 1.746 (less than 10) respectively, and the Durbin Watson value of 1.942 that approximates 2.0. Both independant variables explain 47% of the variation in effectiveness of OSHCs. Furthermore, both competency of OSHCs ($p<0.001$, Beta value=0.455) and scope of OSHCs ($p<0.001$, Beta value=0.299) have strong significant positive effects on the dependant variable, supported by the results of the adjusted R-square (0.469), the F statistics (102.552) and the highly significant corresponding p value ($p<0.001$). The higher Beta value for competency of OSHCs also suggests that it has a stronger influence than scope of OSHCs on effectiveness of OSHCs.

Hence, the results in Model 1 (Table 4) are in support of H_1 and H_2 that a higher perceived level of both competency and scope of OSHCs, contributes to a higher perceived level of effectiveness of OSHCs. Models 3 and 4 (Table 4) show that even when three variables (financial health, size and type of firm) are controlled for in the hierarchical regression analysis, both competency of OSHCs ($p<0.001$, Beta value=0.421) and scope of OSHCs ($p<0.001$, Beta

value=0.264), have strong significant positive effects on the dependant variable; with the former being the stronger contributor given its higher Beta value. This is supported by the results of the adjusted R-square (0.501), the F statistic (33.945) and the highly significant corresponding p value ($p<0.001$). These results lend further support for H_1 and H_2.

The results of the multiple and simple regression analysis (Model 1 and 2) evidence the partially mediating effect of scope of OSHCs on the relationship between competency of OSHCs and the dependant variable for two reasons. Firstly, the Beta value for competency of OSHCs in the simple regression analysis reduces when the scope of OSHC is included in the multiple regression analysis (from 0.654 to 0.455). Secondly, despite the inclusion of the latter, the former still has a significant positive impact on the dependant variable.

Table 4: *Results of Multiple (MRA), Simple (SRA) and Hierarchical Regression Analysis (HRA)*

Variable	Effectiveness of OSHCs (MRA) Model 1	Scope of OSHCs (SRA) Model 2	Variable	Effectiveness of OSHCs (HRA) Model 3	Effectiveness of OSHCs (HRA) Model 4
(Constant)	1.982	1.993	(Constant)	3.206	1.501
Control Variables	-	-	Financial Health	0.362	0.185
			Size of Firm		
			101 to 200	-0.036	-0.042
			201 to 500	-0.128	-0.103
			> 500	-0.069	-0.085
			Type of firm	0.093	0.056
Competency of OSHCs	0.455***	0.654***	Competency of OSHCs	-	0.421***
Scope of OSHCs	0.299***	-	Scope of OSHCs	-	0.264***
R-squared	0.474	0.427	R-squared	0.162	0.516
Adjusted R-squared	0.469	0.425	Adjusted R-squared	0.144	0.501

Cell entries are standardised coefficient estimates (n=231); *p<0.05, **p<0.01, ***p<0.001
Financial health: (0=poor to average; 1=good to excellent); Comparison category for size of firm: less then 101 employees; Type of firm: (0=local; 1=multinational)

4. Discussion

This section discussion the plausible reasons for the pertinent findings of this study.

4.1 Effectiveness of OSHCs

Reactive and proactive abilities of OSHCs were perceived to be at par (means=3.56), attributable perhaps to management's understanding of proactive abilities in terms of 'secondary' proactive ability. With respect to the former, consistent with past research (Cyert & March, 1963; Scholz & Gray, 1990) referred to in Scholz and Gray (1997), management is perhaps convinced of the hazard, and consequently supportive of the OSHC's efforts to prevent a reoccurrence. Management support of the OSHC's 'secondary' proactive ability (e.g. management of inventory to control stacking levels) occurs perhaps because it works within the existing structure or resources, in contrast with OSHC's 'primary' proactive ability (e.g. increase floor space to reduce stacking level), that may be hampered by time and financial constraints (Scholz & Gray, 1997). The relatively low perceived ability of OSHCs to affect fundamental changes in work practices and equipments used (mean=3.47) is consistent with past research (Hart, 2002); attributable perhaps to the following factors: insufficient knowledge (e.g. dust control equipment required instead of face masks to arrest the hazard of exposure to dust), the heavy costs of their implementation andsuch efforts perceived as impingingupon managerial prerogative (Whysall, Haslam, & Haslam, 2006).

4.2 Competency of OSHCs

The low level of perceived training in both technical and non-technical matters (mean=3.18) can perhaps be explained by the fact that the employer is legally vested with the duty to ensure competency of the OSHC's members in legal, technical and process matters (Part V, SHCR 1996). Hence, the employer determines the mode of training, training provider and content of training. The results suggest that management regards the training as a cost rather than an investment, or that training costs may be prohibitive; and perhaps even management's lack of support for employee involvement in OSH via OSHCs.

4.3 Scope of OSHCs

Committee functions perceived relatively more performed are the following routine acts (mean values are 3.6 and above): investigative, inspective (of safety, health and environmental hazards), educative, access to employer’s safety and health records, access to and review of citations and corrective orders provided by DOSH. Inspections to identify environmental hazards

(mean=3.64) and access to citation and corrective orders issued by DOSH officers (mean=3.59) have the lowest means among these routine functions. The former act is lagging perhaps owing to the absence of legal provisions in both the OSHA 1994 and SHCR 1996 emphasising environmental hazards; whereas lagging of the latter is perhaps attributable to the fact that at the time of the study there was no legal requirement imposed on employers to provide such access.

Two review functions are relatively less performed perhaps attributable to them being perceived as falling within management prerogative: (i) review of new technology, process and substance (mean=3.34), (ii) review of the effectiveness of management's health and safety programs, policies and procedures (mean=3.57). The former review function is perhaps relatively less performed compared to the latter, as it is not legislatively mandated.The collection of general OSH information although legislatively mandated is relatively less performed (mean=3.54) attributable perhaps to these factors: (i) lack of time as 67.5% of the respondents claim that an average of eight hours or less per month is spent on OSHC functions; (ii) absence/lack of financial and human resources support from management; (iii) insufficient knowledge on data collection and lack of incentives as respondents may not be rewarded for their efforts.

4.4 Determinants of Effective OSHCs

Both competency and scope of OSHCs have a significant positive effect on perceived effectiveness of OSHCsconsistent with past research (Eaton & Nocerino, 2000). The scope of OSHCs partially mediating the relationship between competency of OSHCs and perceived effectiveness of OSHCs is also consistent with past research (Yassie, Ostry, Hatter, & De Boer, 2005). The findings suggest that competency of OSHCs is an influential variable that affects both perceived effectiveness of OSHCs and scope of OSHCs.

5. Conclusion

The study's results provided empirical support for the hypothesised model and answers to the research questions. They suggest the following: (i) perceived effectiveness of OSHCs falls on the medium scale, with it perceived least able to effect fundamental changes; (ii) perceived competency of OSHCs approaches the lower end of the medium scale, lagging in the area of non-technical knowledge, specifically problem solving and committee process training; (iii) perceived scope of OSHCs falls on the medium scale, lagging in information gathering and

review functions. Lastly, the results also evidenced the strong influence of both competency and scope of OSHCs on perceived effectiveness of OSHCs; and the partially mediating effect of scope of OSHCs on the relationship between competency of OSHCs and effectiveness of OSHCs.

5.1 Policy, Management and Theoretical Implications

From a policy perspective, DOSH has to ensure that OSHCs are competent and aware of their normative, economic and physical powers that are potent in influencing employers to improve OSH at the workplace (Frick, 2011). As an incentive, employers should be enabled to claim some form of tax related benefits in relation to the training expenses of OSHCs; simultaneously being educated on the importance of employee involvement in OSH improvement. The National Institute of Occupational Safety and Health (NIOSH), the training arm of DOSH, should monitor the training of OSHCs, by establishing a database of members of OSHCs, enabling an evaluation of their training needs and competency. Certificates validating competency should enable members to seek career opportunities in the area of OSH, motivating them, especially when provision of monetary or non-monetary incentives for their efforts from employers are absent.

NIOSH should manage the training of members of OSHCs in cost effective and practical ways: members of OSHCs employed in the same industry and geographical location can be trained together enabling the sharing of experiences/resources and the joint development of creative and practical solutions. Most important, through NIOSH, experts and researchers in the varied areas of OSH can be reached by members of OSHCs for consultation. From a theoretical perspective, the findings contribute to past literature by providing Malaysian empirical evidence of the two determinants of effective OSHCs: competence and scope of OSHCs.

5.2 Limitations of the Study

The limitation of this study is it being cross sectionalin nature with a low response rate of usable questionnaires (11.6%). It also relied only upon the responses of members of an OSHC who were provided the questionnaires by the persons in charge of OSH in their firms; hence, having a tendency to be biased, if the recipient has a more favourable view of the OSHC. In explaining the findings in this paper unverified plausible suggestions were made that may need further investigation given the Malaysian context.

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