

EFFECTIVE LEADERSHIP BEHAVIOURS IN CONSTRUCTION SAFETY PRACTICES

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ABSTRACT

Effective leadership behaviours have been shown in literature to be a contributing factor to construction safety practices. However, researchers have neglected the leadership behaviours and have their focus on the construction projects features of management. The inclusion of leadership as a part of an organisation has been the subject of interest all over the world. This development has driven researchers' interest to come out in a holistic manner to give the clear understanding of leadership. The review of literature in the existing body of knowledge becomes paramount in order to continue with the research on the subject matter. The review will also enable the road map for the future to be drafted. This development has led to the review of empirical studies conducted by researchers on leadership in the construction industry. The research adopted literature study from various sources such as reviews of leadership behaviour in the construction safety practices. This review of literature led to the selection of appropriate literature for the study. A rigorous process was carried out in the selection of appropriate literature for the study, from a total number of fifty-two studies reviewed, out of which thirty-five empirical studies were selected. The findings from literature were summarised through coding, according to the publication outlet, authors, nature of the study, country of publication, target population, methodology and key findings. It was found out that most of the empirical studies have focussed on construction projects features management, while less attention has been given to several other equal dimensions, particularly leadership behaviours in the construction industry. This study focussed mainly on the effective leadership strategies in achieving organisational goals. Discussions also included the health and safety improvement in the construction industry and types of motivational measures for safety

Keywords: Behaviours; Effective Leadership; Safety Practices.

1. INTRODUCTION

The construction industry has the third highest fatality rate and the ninth highest permanent disability rate per 1000 00 as reported by the South African Construction Industry Development Board (CIDB) (in Smallwood, 2010). The high rate of mortality among construction firms has been attributed to the risk and problems they faced. The construction industry has also been known to be the most risky business arena (Ofori and Toor, 2012). Hosseinian and Torghabeh (2012) asserts that most of the delays in project completion and high rise of company's expenditure are due to accidents in the construction industry. The reputation and reliability of contractors are ruined due to the delay in the project. They further indicated that high rates of accidents and fatalities in the construction industry have placed it among hazardous industries. Construction Health and Safety (H&S) is not improving (CIDB, 2009) even though, significant efforts have been made by several agencies to improve H&S within the construction industry in South Africa. Report from the South African Construction Industry Development Board (CIDB, 2009) shows that construction continues to contribute a disproportionate number of fatalities and injuries. This has contributed to the continuous high level of non-compliance with the Health and Safety (H&S) regulations in South Africa. Michaels (2012) asserted that there is the need to implement safety and health management systems and develop a culture of safety at workplaces to assist in accident prevention. This

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paper presents an exploratory study of effective leadership behaviours in construction safety practices. It began with leadership in the construction industry and strategies of an effective leader in achieving organisational goals. This is followed by effective leadership behaviours, leadership roles, personality, values and emotional commitment, safety practices and health and safety improvement in the construction industry.

2. RESEARCH OBJECTIVES

The study addresses the following questions: Leadership in the construction industry.

Who is an effective leader?

Which strategies will be effective for achieving organisational goals?

Which type of safety practices will contribute to the safety of employees?

Which type of motivation will lead to safety improvement?

How can effective communication and training contribute to safety practices?

From a discussion based on the key works in the literature, effective leadership behaviour that will lead to safety practices is explained.

What it means to be an effective leader in construction, and what it takes to succeed as an effective leader in construction are discussed.

3. LEADERSHIP IN THE CONSTRUCTION INDUSTRY

The capacity to engage people and groups outside one's formal control and inspire them to work toward common goals. Despite differences in convictions, cultural values, and operating norms are termed as collaborative leadership (Ibarra and Hansen, 2011, cited in Ofori and Toor 2012). A wide range of reasons have been cited for the failures in the construction industries in developing countries (Enshassi *et al.*, 2006 cited Ofori and Toor, 2012). Koksai and Arditi (2004) cited Ofori and Toor, 2012) cited insufficient capital, lack of business knowledge, fraud, managerial experience, line experience, commitment, poor working habits and environmental problems. Such as weaknesses in the industry, the impact of various disasters, poor growth prospects as well as high interest rates as the reasons for organisational failures in the construction industry. Reports of severe deficiencies in project performance such as, cost and time overruns, poor quality, technical defects, poor durability, and inadequate attention to safety and environmental issues (Ofori, 2012). Poor performance has also been reported as one of the greater implications. Little knowledge of any of the aspects of construction by the clients, end purchasers, users and other stakeholders of the construction industry have also been mentioned. There is a lack of appreciation, among researchers of the dangers of ineffectiveness of leaders in the construction industry. This calls for a greater need for leadership in construction in the developing countries to be developed to achieve organisational goals. Many models of leadership have shown their importance. The current study was undertaken on effective leadership behaviours in the construction safety practices. Research has indicated that effectiveness is a fundamental to good leadership. Gandz (2005) defines an effective leader simply as someone with good knowledge of construction workplace and strategies to organisational safety practices.

4. STRATEGIES OF AN EFFECTIVE LEADER IN ACHIEVING ORGANISATIONAL GOALS

Any effective leader is required to have good knowledge of workplace to be able to sense what is coming up ahead. This will enable him to see opportunities that should be the target of action and to see threats before they materialize. He should be able to establish means of achieving the goals of the organisation in order to get results. The role of the leader is to develop the right strategies to get results-winning strategies. An effective leader must be able to lead his workers for a very long time. He should as well be able to carry-out the work at hand properly.

Strategies to be carried out should be very valuable and well executed. And execution of any plan is only

valuable if the strategy is right. An effective leader should be able to take note of progress of work and make necessary changes at any stage of work. He should be able to recognize any task that is not well executed. So that, care will be taken to monitor the outcomes systematically and thoroughly. He should always be in the position to make some changes in the strategies to achieve the organisational goals. Assessment of the works carried out should be done to put him on alert and be able to take any necessary action. A highly effective leader should be able to raise the level of his sensitivity to different information when new strategies are being introduced. An effective leader should always look for information that will inform and improve his strategic decisions to benefit of the organisational safety practices. This will pave way for any changes whenever it deems fit to strengthen the effort of the organisation. A highly effective leader should be able to act for both the short and the long terms simultaneously. Surveying of the work the environment is a must to enable him develop winning strategies for the organisation. The execution of the task should be done perfectly and monitoring must be carried out systematically. The core competencies of the organisation, management and leadership talents are built on through the effort of an effective leader (Gandz, 2005). Figure 1 shows the strategies in achieving organisational goals.

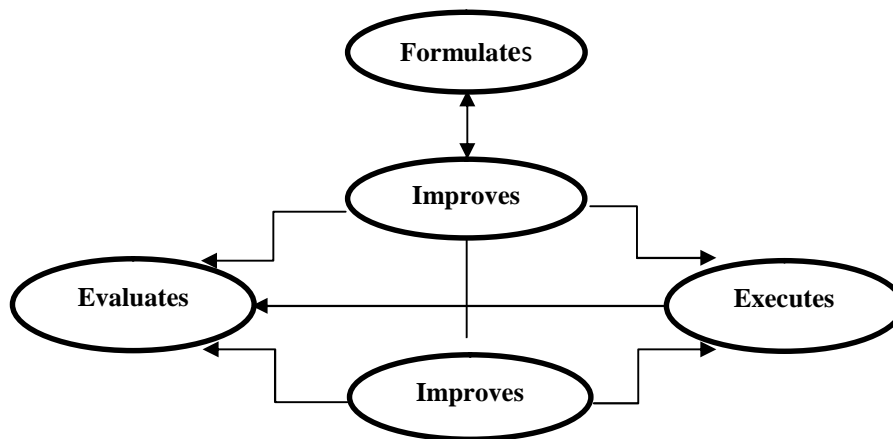


Figure 1: Strategies in Achieving Organisational Goals
Adapted from Gandz (2005)

There are three challenges of leadership namely: strategic, executional and developmental. Strategic involves both environmental surveillance and the formulation of winning strategies. While executional involves the implementation of those strategies, monitoring their impact and making adjustments as indicated. Developmental is based on building core competencies and cadres of leaders at all levels (Gandz, 2005).

5. EFFECTIVE LEADERSHIP BEHAVIOURS

A simple way of leadership practices or behaviour was developed by Kouzes and Posner (Business-Leadership-Quality (n. d.). Kouzes and Posner (1995) Model is made up of inspiration of the vision (IV), modelling of the way (MW), challenging the status quo (CS), encouraging the heart (EH) and enabling others to act (EO) as shown in Figure 2. These variables agree with the characteristics and traits of leadership.

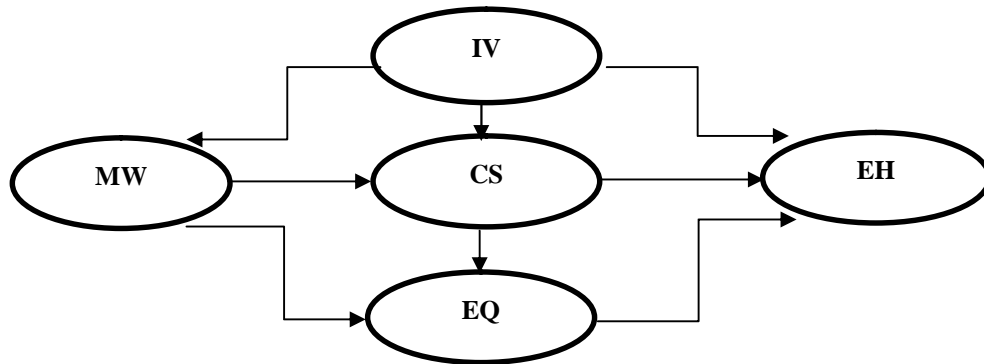


Figure 2: Kouzes and Posner (1995)
Source: Adapted from Business-Leadership-Quality (n.d.)

The strength and weaknesses of employees can be determined by the leader who works effectively in order to motivate them towards the achievement of the industry safety practices. Any leader expect good outcome from his employees works towards the achievement of the organisational goals by developing a strategy for his workers. The effective leader ensures that all employees receive appropriate training needed for their tasks. Give instructions and attach importance to employee’s views to ensure smoothly running of the industry. Apart from these, the day to day activities of the industry is also managed. He provides report on the progress of any operation to be given to appropriate personnel the industry (Educational Portal, n.d.). The leader should be capable of developing and implementing a timeline for his workers to achieve the industry’s goals. A leader should be able promote the principles of excellent teamwork among workers. This can be achieved by establishing values and goals to determine the activities before any action is taken (Tracy, 2008). Being an effective safety leader requires one to be aware of his responsibilities and commit himself to his work emotionally (Krause, 2007).

6. LEADERSHIP ROLES, PERSONALITY, VALUES AND EMOTIONAL COMMITMENT

The role of a leader becomes very important when an organisation focuses on safety improvement. Effective safety leadership has to do with several measurable and empirically-validated components. Figure 3 describes the personality (P), values (V) and emotional commitment (EC) of a leader and how he influences the safety practice in the construction industry (Krause, 2007).

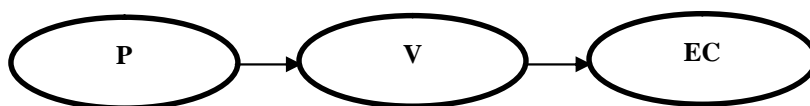


Figure 3: Effective Leadership
Source: Adapted from Krause (2007)

The core attributes that define personality in the “Big Five,” are predictive of effective leadership. This has to do with change management, execution of organisational strategies, conflict handling and management of workers (Krause, 2007). The leadership personalities are in several form such: emotional resilience, extroversion, learning orientation, collegiality, and conscientiousness. A leader with emotional resilience can deal with stress and negative emotions when it comes to handling workers. An extroverted safety leader is always in contact with his workers about safety that helps to improve the safety practices of the construction industry. The aspect of learning orientation by the leader needs to be put under control even his creativity and new ideas that need. A highly collegial safety leader has his way of proving safety motivation to enable the workers put in their best at any assigned task. A highly conscientious leader has

the competence and ability to handle safety issues in an excellent manner. This attribute minimise occurrences of incidents and accidents in the construction industry (Krause, 2007). A leader in a construction industry will show how valuable his tasks are and commit himself to the tasks ahead with high emotion. This will contribute the creation of safety culture and ensures that the organisation achieves its proper end (Krause, 2007).

7. SAFETY PRACTICES IN THE CONSTRUCTION INDUSTRY

The Occupational Safety and Health Administration (OSHA) workplace safety requirements enshrine the provision of a safe work environment for your employees to protect them from any harm. Accident can be reduced if safety issues are attended to immediately. A comprehensive safety plan is needed to cater for hazards that occur. This should include hazards identification and handling, provision of warning signs, clearing of any material that may contribute to hazard. Training on how to handle minor injuries should be given to employees. Means of handling injured employees should be included in a detailed action plan. There should be a review on any occurrence of accident and how the problems are solved. Changes in safety policy should be made when necessary and training on new steps to be incorporated should be offered (Green, n.d.). The safety officers in the construction industry have the responsibility of ensuring that safety measures are followed strictly at the site. Construction sites activities are carried out as specified under the health and safety (H&S) regulations at workplace by the safety officer. This leads to compliance in the construction industry. He ensures the execution of industry's policies and procedures, takes care of anything that concerns with safety, site inspection, training of new workers and upgrading of knowledge of workers on H&S and perusing legal requirements regarding workplace H&S. He also liaises with other institutions relating to programmes and issues on safety of the workplace and environment to ensure sanity at the construction sites (Petrick, n d.). The safety officer sees to the policies and procedures of the firm that comply with Occupational Health and Safety Acts (OHSA) rules. The safety officer should be conversant with the all relevant environment laws to enable him operate effectively. The safety concerns of firm in relation to complaints and reports received on dangerous working conditions at the sites for investigations. Site inspections are carried out by the safety officer with inspectors from the government agency to facilitate evaluation of construction sites. Training of employees on safety measures at workplace are carried out for effectiveness in safety practices. The safety officer also sees to the legal requirements by updating the management on legal regulations and liaises with other safety officer on behalf of his firm on safety matters. The occupational health risks management is placed on the employer under the management of Health and Safety (H&S) at Work Regulations 1999. Adeogun and Okafor (2013) asserted that a systematic planning approach is necessary to answer key questions with respect to Occupational Health and Safety (OHS). To meet these legal requirements as well as improving the organisation's H&S performance and ultimately reduce risks and costs. The employers should have the following measures in place:

- H&S policies and procedures with practical arrangements for managing occupational health risks.
- Provision of employee awareness training on manual handling, control of substances hazardous to health, noise at work and hand arm vibration.
- Manual handling risk assessments and safe handling techniques for manual handling activities.
- Health surveillance, sickness absence management, return to work policy and stress management strategy.
- Arrangements for managing subcontractors, including procedures for managing their occupational health risks.
- Employers understanding their duties under the Construction (Design and Management) Regulations 2007 (CDM, 2007).

8. HEALTH AND SAFETY IMPROVEMENT IN THE CONSTRUCTION INDUSTRY

It has been informed in literature that the approach used by the employers towards providing strategic safety commitment and a supportive work environment will contribute to the safety management

behaviour of an organisation. Therefore, the leadership behaviours of leadership of any organisation is considered to be very important in the achievement of any organisational safety goals (Panthi *et al.*, 2012). Moreover, employers' behaviour contributes to encourage employees' safety compliance to OSH improvement in the construction industry. Jaselski *et al.* (1996 cited Zin and Ismail, 2011) are of the view that safety performance of any organisation can be achieved through the commitment and support received from management. Since management approach to safety generates and reinforces employee perceptions about what form of activity gets rewarded, supported and expected in a particular setting (Panthi *et al.*, 2012). Employees' behaviour towards H&S at the workplace can change through the type of commitment shown by management. Fernando and Janbi (2008) asserted that the employers should demonstrate their commitment through strongly realization of safety compliance to safety and ensure that everyone in the organisation is certain about their safety and health responsibilities. Bakshi *et al.* (2009) asserted that the critical factor in understanding and explaining the work related behaviour of employees in organisations should be linked with organisational commitment. Employees' behaviour will lead to the type of types of motivation for safety measures. Effective communication, training and education will also contribute to achieve safety at workplace.

8.1. EMPLOYEE BEHAVIOUR

Employee behaviour plays a significant role in workplace safety and injury prevention. Employee behaviour has been found to be one of the greatest determinants in workplace safety, especially as employees interact amid a host of varying safety issues (Schultz, 2004). Both employers and employees have very similar perceptions of the respective responsibilities of each party for health and safety in the workplaces. Health and safety is a set of rules and regulations that relate directly to safety in the workplace to ensure the general wellbeing for employees (Elgood *et al.*, 2004). Smallwood (2010) in a research conducted on excavation health and safety (H&S): a South African perspective has indicated worker attitude as one of the factors leading to unsafe act of a worker. Schultz (2004) asserted that attitude is a key to understanding employee behaviour and prevention of on-site-job injuries. It is therefore, mandatory for employer's to educate their employees on the possibility of workplace injury before any safety programme should be instituted. The organisation must undergo a culture change from the top and filter its way down to all employees for any attitudinal change to occur to every employees (Schultz, 2004). Central to this culture is the feeling that safety is a top priority and nothing else. Employee behaviour also relates to culture, and can be linked to ignorance (Smallwood, 2010). If this is checked it will lead to improvement towards health and safety in the construction industry.

8.2. TYPES OF MOTIVATION FOR SAFETY MEASURES

"According to Teo *et al.* (2005b) incentives can be used to motivate the ones who follow the safety rules on construction sites." Motivational tools including rewards and incentives influence to fostering safe work behaviour in construction sites (Teo *et al.*, 2005a). Each of these tools contains various sub tools as shown in below:

- Positive Reinforcement: Monetary reward/bonus, job promotion, certificate of recognition, rewards in kind (overseas trips), personal recognition
- Negative Reinforcement: Close and strict supervision
- Extinction: Termination of service, reporting to authorities
- Punishments: Imposing fines, suspension from work, demotion

Teo *et al.* (2005) argues that close and strict supervision among negative reinforcement is the most effective, monetary rewards. Imposing fines and suspension from work are the third most effective way to foster safe work behaviour.

Teo *et al.* (2005) proposed four suggestions can be used by managers to either encourage or discourage certain behaviours of workers (i.e. Positive reinforcement, negative reinforcement, punishment and extinction.

- Positive reinforcement

- Positive reinforcement provides the worker with reward consequence for performing the desired behaviour.

Positive reinforcement enables motivation of workers to perform their jobs in a safe manner. Contractors should offer incentives, praise, monetary rewards, and promotions on the job (Teo *et al.*, 2005).

- Negative reinforcement

Negative or avoidance reinforcement encourages workers to perform the desired behaviour in order to avoid a negative consequence. Contractors should use criticism or threat of losing job to motivate workers to perform their jobs in a safe manner (Teo *et al.*, 2005).

- Punishment

Punishment reinforcement gives the worker a negative consequence so that the worker can stop performing an undesirable behaviour. Concerning safety of construction site, punishments may include pay cuts, temporary suspensions, demotions and firing.

- Extinction

Extinction reinforcement withholds positive consequences to get the worker to stop performing the undesirable behaviour. At the construction site, a worker who constantly flouts safety regulations may have his or her appointment terminated to curtail the unsafe practice.

8.3. EFFECTIVE COMMUNICATION

Effective communications is an essential consideration to safe and efficient workplace. Therefore, there is the need for effective communication in the construction industry because many construction accidents are found mainly caused by symptoms of safety non-compliance to safety requirements (Ismail and Majid, 2007). Communication can be achieved through visible behaviour, written communication of H&S policy statements and face to face discussions between employer and employee. In the visible behaviour, employer can communicate the importance of safety and health. Then, the employees soon recognize what employer regards as important and will adopt their behaviour accordingly. Thus, through negative behaviour employer can undermine the safety and health culture of the organisation (Zin and Ismail, 2011). While in the written communication of H&S policy statements, statements concerning H&S roles and responsibilities, performance standards and findings from risk assessments are made available to employees. Whereas, face to face discussions between employer and employee enable employees to make a personal contribution and helps them to feel involved in the safety and health of the organisation (Zin and Ismail, 2011). Ideally employees should be able to talk to employers during safety inspection. The interaction and communication of management with workers in terms of their commitment, support and motivation can have a positive (or negative) influence on workers. The influences are perceptions, attitudes, competence, and behaviours towards safety (Panthi *et al.*, 2012). Cooper, (2010) is of the view that employees attitude can be shaped through the leadership skills exhibited by senior management. "According to Ismail and Majid (2007) quality and consistency of leadership demonstrated by management as a role model for safety will enhance the achievement of the other safety management objectives".

8.4. EFFECTIVE HEALTH AND SAFETY TRAINING AND EDUCATION

Accident prevention can only take place through effective health and safety training. The need for education and training of employees in all aspect of health and safety in the construction industry. Hence, education and training programmes play a significant role in enhancement of safety in construction and it is important to increase safety awareness and change behaviour of employees (Ghani *et al.*, 2010). Good relationship between employers and employees on matters such as safety talk and advice on safety matter is related to improve safety motivation and will encourage employees' safety behaviour (Hassan *et al.*, 2007). Workers need to be aware of the hazards and risks at their workplace in order to encourage them to work in a healthy environment and safety manner (Smallwood, 2010) because lack of training is a barrier.

9. RESEARCH DESIGN/METHODOLOGY

The research method adopted is literature study from various sources such as literature reviews of leadership in the construction industry, strategies of effective leadership in achieving organisational goals and safety practices in the construction industry. Studies relevant to type of motivation for safety improvement, effective communication and training that will contribute to safety practices in the construction industry were also sought. The results from the literature study were analysed to obtain specific issues that are relevant to the effective leadership behaviours in construction safety practices.

10. CONCLUSIONS AND RECOMMENDATIONS

The purpose of this academic paper was to highlight the effectiveness of leadership behaviours in construction safety practices. The review showed that leadership behaviours toward safety practices is the most powerful means of safety performance in the construction industry. The efforts shown by leadership behaviours towards occupational health issues will contribute to good safety practices in the construction industry. Management should be committed towards safety and health at the workplace to change employees' behaviour towards safety practices in the construction industry. There is the need for effective communications and good relationship between employers and employees on matters such as, safety talk and advice on safety matters. This will improve safety motivation and encourage employees' safety behaviour.

11. REFERENCES

- Adeogun, B.K. and Okafor, C.C., 2013. Occupational Health, Safety and Environment (HSE) Trends in Nigeri. *International Journal of Environmental Sciences, Management and Engineering Research* [online], 2(1). Available from: <http://www.ijesmer.com> [Accessed 2 July 2014].
- Bakshi, A., Kumar, K. and Rani, E., 2009. Organisational Justice Perceptions as Predictor of Job Satisfaction and Organisation Commitment. *Journal of International Business and Management*, 4(9), 145-154.
- Hassan, C.C.R., Basha, O.J. and Hanafi, W.W.H., 2007. Perception of Building Construction Workers towards Safety, Health and Environment. *Journal of Engineering Science and Technology*, 2(3), 271-279.
- Construction Industry Development Board (CIDB), 2009. *Construction Health and Safety in South Africa: Status and Recommendations* [online]. Available from: <http://www.cidb.co.za> [Accessed 16 June 2014].
- Construction (Design and Management) Regulations (CDM), 2007. *Managing health and safety in construction. Approved Code of Practice* [online]. Available from: www.hsebooks.co.uk [Accessed 5 October 2014].
- Cooper, D., 2010. Safety Leadership: Application in Construction Site. *Supplemento A, Psychologia*, 32(1), 18-23.
- Educational Portal, n.d. *What Is a Team Leader? - Description, Role and Responsibilities* [online]. Available from: <http://education-portal.com> [Accessed 22 November 2014].
- Elgood, J., Gilby, N. and Pearson, H., 2004. *Attitudes towards health and safety: a quantitative survey of stakeholder opinion*. Available from: <http://www.hse.gov.uk/research/misc/attitudes.pdf> [Accessed 22 May 2015].
- Fernando, Y.Z.S. and Janbi, L., 2008. The Determinant Factors of Safety Compliance at Petrochemical Processing Area: Moderator Effects of Employees Experience and Engineering Background. In: *9th Asia Pacific Industrial Engineering & Management Systems Conference*. 442-445.
- Gandz, J., 2005. Leadership, Ivey Business Journal, *Improving the Practice of Management* [online]. Available from: <http://iveybusinessjournal.com> [Accessed 22 November 2014].
- Ghani, M.K., Hamid, Z.A., Mohd, M.Z.M., Rahim, A.H.A., Kamar, K.A.M. and Rahman, M.A.R., 2010. Safety in Malaysian Construction: The Challenges and Initiatives. *Construction Research Institute Malaysia (CREAM)*, 16-19.
- Green, C., n.d. *Best Safety Practices for the Workplace, Demand Media* [online]. Available from: [www.http://smallbusiness.chron.com](http://smallbusiness.chron.com) [Accessed 7 February 2015].
- Hosseinian, S.S. and Torghabeh, Z.J., 2012. Major Theories of Construction Accident Causation Models: A Literature Review. *International Journal of Advances in Engineering & Technology*, 4(2), 53-66.

- Ismail, F., Torrance, J.V. and Majid, A.M.Z., 2007. The Reflection of Management Commitment on OSH within the Malaysia Construction Organisation. In: *10th Conference and Exhibition of National Institute of Occupational Safety and Health (NIOSH)*, Malaysia. 179-185.
- Kouzes, J. M. and Posner, B. Z., 1995. *The leadership challenge: how to keep getting extraordinary things done in organisations*. California: Jossey-Bass.
- Krause, T.H., 2007. *Leadership: The Effective Safety Leader: Personality, Values & Emotional Commitment* [online]. Available from: <http://ehstoday.com> [Accessed 18 November 2014].
- Michaels, D., 2012. *Outlines OSHA's Efforts to Shift the Safety Curve. National Safety Council Congress and Expo* [online]. Available from: www.EHSTODAY.com [Accessed 15 June 2014].
- Ofori, G., 2012. *Developing the Construction Industry in Ghana: the case for a central agency* [online]. Available from: <http://buildingcontractorsgh.com> [Accessed 14 May 2015].
- Ofori, G. and Toor, S.R., 2012. Leadership Development for Construction SMEs. In: *EPOC 2012 Conference, Working Paper Proceedings, Engineering Project Organisations Conference*, Rheden, Netherlands 10-12 July 2012.
- Panthi, K., Farooqui, R.U. and Umar, M., 2012. Assessment of Current Safety Attitudes and Approaches of Contractor Management in the Construction Industry- In: *The U.S Experience 48th ASC Annual International Conference Proceedings*, 2012. Associated Schools of Construction.
- Petrick, J., 2015. *Duties of a safety manager Chron. Demand Media* [online]. Available from: <http://work.chron.com> [Accessed 22 November 2014].
- Schulz, D., 2004. *Employee Attitudes-A Must Have* [online]. Available from: <http://ohsonline.com/Articles/2004/06/Employee-AttitudesA-Must-Have.aspx> [Accessed 22 May 2015].
- Smallwood, J. J., 2010. Excavation health and safety (H&S): A South African perspective. In: Egbu, C., ed. *26th Annual ARCOM Conference*, UK 6-8 September 2010, Leeds: Association of Researchers in Construction Management, 233-241.
- Teo, E. A., Ling, F. Y. and Chong, S., 2005a. Fostering Safe Work Behaviour in Workers at Construction Sites. *Engineering, Construction and Architectural Management*, 12(4), 410-422.
- Teo, E. A., Ling, F. Y. and Chong, A. F., 2005b. Framework for Project Managers to Manage Construction Safety. *International Journal of Project Management*, 23(4), 329-341.
- Tracy, B., 2008. *The Role of a Leader, Leaders are made, not born* [online]. Available from: <http://www.entrepreneur.com> [Accessed 23 November 2014].
- Zin, M.S. and Ismail, F., 2011. Employers' Behavioural Safety Compliance Factors toward Occupational, Safety and Health Improvement in the Construction Industry, ASEAN. In: *Conference on Environment-Behaviour Studies*, Savoy Homann Bidakara Bandung Hotel, Bandung, Indonesia.