

# MANAGERIAL STRATEGIES TO CURTAIL WORKPLACE INDUCED ACCIDENTS IN SMALL TO MEDIUM ENTERPRSES (SMEs) IN THE CONSTRUCTION INDUSTRY IN MASVINGO URBAN, ZIMBABWE

**Takupiwa NYANGA**

Department of Human Resource Management,  
Julius Nyerere School of Social Sciences, Great Zimbabwe University, Masvingo, Zimbabwe  
Email; [takupiwa@gmail.com](mailto:takupiwa@gmail.com)

## Abstract

Health and safety issues are fast becoming established fundamental antecedents in the development, survival and growth of Small to Medium enterprises (SMEs) throughout the globe. The study sought to find out the main causes of workplace related accidents in SMEs in the construction industry. Furthermore, the study sought to establish managerial strategies employed by SMEs in the construction industry to curb workplace related accidents and also to develop a good health and safety culture in their employees. A quantitative research approach was utilised with closed ended questionnaire being used as the main data collection instrument. A multiple descriptive case study was used to carry out this study. Data was collected from a sample of 100 (Female-20; male-80), drawn from SMEs in the construction industry in Masvingo urban. Data analysis was done using the Statistical package for the Social Sciences (SPSS) Version 21 and Microsoft Excel. The study established that the main precipitators of accidents at workplaces are inappropriate machinery and equipment, inadequate awareness campaigns, failure to put danger warning signage, inadequate and inappropriate personal protective equipment. The strategies that can be employed to curb workplace accidents in the construction industry are giving workers incentives for not involved in accidents, safety meetings before work start, effective communication system, and employee participation on safety issues, training and development, creation of a safety committee and designing a good and effective layout.

**Keyword:** SMEs, Safety, Construction, Health, Manufacturing Small to Medium Enterprises, Employee, employer.

**DOI:** <https://doi.org/10.24818/beman/2022.12.1-01>

## 1. INTRODUCTION

Employee health and safety is of paramount importance to all organizations throughout the world. Health and safety issues have become some of the key antecedents that significantly affect both individual and organizational performance. A safe work environment propels business boom and

prosperity since employees will be health, motivated and prepared to exert their energy towards the realization of organizational goals. Developing a health and safety culture in employees goes a long way in achieving the health and safety goals of an organization (Nyanga & Sibanda 2020). Studies (Mpedi and Nyenti, 2016, Nyanga and Sibanda 2020) have shown that there are inherent deficiencies and shortcomings in the health safety systems put in place by various organizations. Nyanga and Sibanda (2020) further argued that there is need for health and safety culture to be developed in the extractive industries, construction and agro-food sectors where accidents are more frequent and severe. The ever increasing number of accidents at workplaces has ignited many industries around the world to show an increasing interest in the concept of safety culture as a means of reducing the potential for large scale disasters and accidents associated with routine tasks (Arkson and Hadikusumo, 2007). A study conducted by Alhajeri, (2011) entitled the awareness and development of an 'appropriate' safety culture established various ways of propelling a health and safety culture in various organisations. Other studies (Cox and Flin, 1998) have also argued that offshore health and safety management practices have the potential of providing an umbrella for both individual and organizational safety issues and can be used as a vehicle for framing further improvements.

Organizations throughout the world are obliged by the law to ensure that they establish a health and safe work environment for both their internal and external clients. According to the Zimbabwean laws such as the Labor Act and the National Social Security Authority (NSSA) Act, employers are compelled to create a safe work environment by providing Personal Protective Equipment (PPE) and ensuring that at all times the work environment is safe. Despite the clear provisions of sections of various forms of legislation in outlining the health and safety obligations of employers and employees, the number of accidents at workplaces continues to rise. There have been a number of stories that have been reported in newspapers and the social media about the workplace accidents in Zimbabwe. The hardest hit areas are the construction, manufacturing and mining industries. This study focused on one of the hardest hit areas, that is the construction industry. In the construction side, the worst affected are the small to medium enterprises because of their inadequacies in the supply of accident prevention and management equipment and systems. Workers in the construction industry are prone to various forms of accidents, most of which are caused by human errors or recklessness. Karedza et al (2014) observed that SMEs face quite a number of challenges, one of which is the safety of their workers. According to McSween (2003), employees can do shortcuts and choose not to follow the organizational laid down safety procedures, which in turn expose them to various forms of accidents. Studies have shown that the rates of unsafe acts continue to rise in the construction industry, which has consequently led to a sharp increase in the number of work related accidents and injuries. According to Armstrong (2010), all

employees are expected to be responsible not only for their own safety, but for the safety of other workers as well. Armstrong's assertion implies that both Management and employees share a mutual responsibility towards occupational health and safety.

Against this setting, there has been very little dialogue on safety culture in Zimbabwe especially in SMEs in the construction industry. The main purpose of this study was to address workplace related disasters in the construction industry in Zimbabwe, an area which has not been researched on by many scholars. Very few studies if any have been done to address workplace disasters in the construction industry in developing countries. To address the problem this study focused specifically on strategies for managing and curbing workplace related accidents in the construction industry in Masvingo urban. The study also focused on developing a health and safety culture among employees in SMEs in the construction industry.

## **2. LITERATURE REVIEW**

Occupational health and safety involves putting in place effective and efficient systems, programs, decrees, laws, policies and regulations to avert and lessen the occurrence of accidents, injuries and illnesses and promoting accident awareness at workplaces (Kartam, 2000). Occupational health and safety is a broad discipline which encompasses all aspects relating to the safety and health of both management and workforce from the working conditions to the overall health of an employee (Ali, 2009). It is the responsibility of management to make sure that its workforce uses appropriate machinery and tools and that worker are provided with adequate personal protective clothing. More importantly it is essential that workers are well trained on issues governing safety and health in workplaces as espoused in ILO 1985, Convention No. 161, labour Act 28:01 and the Constitution of Zimbabwe.

This study is guided by Heinrich (1931)'s domino theory which is one of the key theories in the management of health and safety issues at workplaces. The theory has five dominos, the first being the social environment and ancestry, which is about the control of the operations by management. Managers have the primary responsibility for ensuring that work is done in a safe place. The workplace has to be safe and free from all forms of materials that can cause accidents. For example, managers have to clear the workplace and also provide protective clothing to the employees. In the second domino, Heinrich postulates that, environmental and genetic defects such as carelessness and neglectfulness play a momentous role in influencing hazardous acts which consequently cause accidents at workplaces (Hamid et al. 2013). The third domino is hinges on the unsafe acts made by workers, for instance starting the apparatus and equipment without warning, and also the negative working conditions such as poor lighting, and poor ventilation (Hamid et al. 2013). According to Heinrich

(1931) the third domino is the instantaneous cause of accidents, hence if they are eradicated the other factors become insignificant. Heinrich spearheads the ideal that, an accident is a result of many occurring events fixed in a logical order, thus the domino sequence (Hamid et al. 2013). According to Heinrich, an injury is a result of an accident and this range from minor scratches to major injuries.

Alukas (2000) observed that Heinrichs' Domino Sequence Theory's first three dominos focused on the impact of human conduct on health and safety matters, which therefore shows that human beings or the human capital play a critical role in reducing the number of accidents at the workplace. In line with several reports in the media that most accidents in emerging small mines are caused by carelessness on the part of workers and management, artisanal miners play a major role in reducing the number of accidents at their workplaces. Furthermore, Heinrich cited in (Hamid et al. 2013) gives emphasis on both management and the labor force to be safety cognizant so as to reduce and curtail the occurrence of accidents. The emphasis of this research is to analyses the management and development of strategies for promoting health and safety and reduce the occurrence of accidents in small and medium enterprises in the construction industry in Zimbabwe. Reduction of accidents need both the management and workers to fully participate in the safety and health awareness, which is a perfect fit with the Domino Sequence Theory which seeks to address all human influence in promoting accidents (Health and Safety Authority, 2018).

In addition, the theory can trace the root cause of accidents in organizations and focuses on strategies for developing health and safety culture among Wildlife employees which prevents the recurrence of accidents. Yukl (2006) asserts that an increase in the recurrence of accidents on the working environment reduces employee morale, yet according to Tiwari (2014), low employee morale has a negative impact on the overall performance of the organization. Low morale is associated with complaints, strikes, violation of protocols, and high employee turnover. Most managers give a blind eye on the unsafe working conditions, which in turn result in accidents at workplaces (Arkson and Hadikusumo, 2007). According to Heinrich's theory of accident prevention, lifting the central domino that is eliminating unsafe acts and conditions will minimize or prevent the occurrence of accidents (Hamid et al. 2013).

Du Pond, (2011) is of the view that the best approach to mitigate occupational accidents, injuries, and illnesses is to involve everyone in the organization to take part in the implementation and promotion of safety and health procedures in the organization. Organizations with active health and safety leadership are characterized by low accidents, injuries, and high productivity, highly motivated, and satisfied employees (OSHA, 2002). It is important for an organizations' management to drive behaviour based safety culture in the working environment, since culture molds behaviour (Skeepers and

Mbohwa, 2016). A study carried out by Agnew and Asworth (2012) showed that occupational safety and health are essential measures that are employed by a combination of both management and employees for purposes of reducing workplace hazards and accidents. Well planned and implemented workplace health and safety programs also improve the health and wellbeing of workers and all the stakeholders of the organisation (HSA, 2018). Occupational safety promotions should always go further than the legislative requirements. Some of the programs which are not necessarily provided for in legislation are work-life balance policies, awareness campaigns on health practices such as exercises, health diets and many others. Studies carried out revealed that well planned and acceptable occupational health and safety programs put in place by the organization leads to higher employee morale, reduced rate of absenteeism, increased retention rate, employee satisfaction, and overall an increase in productivity (Agnew and Ashworth, 2012).

### **3. RESEARCH METHODOLOGY**

The study employed the descriptive multiple case studies design. Four SMEs drawn from the construction sector in Masvingo urban participated in the study. Bryman (2012) is of the view that a case study generally comprises of comprehensive and in-depth analysis of one case or single or multiple case organizations. It was essential for the study to adopt a descriptive multiple case study research design because it makes sure that the enriched information and data is gathered since a detailed analysis of issues is done and also data is collected from more than one organization. Collecting data from more than one organization enhances the trustworthiness of the collected data (Kothari and Garg, 2014). The target populations of this study were both management and employees in SMEs in the construction industry in Masvingo urban. The population included employees in managerial positions, supervisory positions, semi-skilled, skilled and un-skilled workers. The exact number of the target population was not established because some of the SMEs in the construction industry were not registered and also that the majority of SMEs do not keep employees beyond the construction project. The study targeted both managers and employees because both of them play a key role in the promotion, enhancement and management of health and safety in the construction industry. For instance, management is responsible for developing strategic plans for enhancing health and safety for employees and the rest of the stakeholders. On the other hand employees have a role of implementing health and safety rules and protocols put in place by the organization hence their participation in this study was very essential. A sample of one hundred (100) participants was chosen to participate in the study. A sample of 100 participants was opted for because it was representative enough for the population of the study. 100 participants constituted over 30% of the population of the study which is well above the recommended percentage of the sample by several scholars. A sample

that adequately represents the population bears positive implications on statistical validity of the data. A voluntary sampling technique was used to select all the participants who participated in the study. Questionnaires were sent to human resource managers via email and construction employees social platforms. Workers made decisions either to participate or not to participate in the study. The voluntary sampling technique was used because it had an advantage of giving all the subjects equal opportunities of being selected to participate in the study. Furthermore, the voluntary sampling approach ensures that there is no bias in the selection of the participants and that there are higher chances that the sample was representative of the population under study. Data was collected by administering a questionnaire to all the selected workers and members of management. Respondents were given up to one (1) week to complete and return the questionnaire. The time frame to complete the questionnaire was deemed by the researcher as long enough for respondents to complete without being rushed. This gave the respondents the time to think through their responses and give well thought out responses. A questionnaire was opted for because it provided and accorded respondents an opportunity to express their views freely and at their own pace. Furthermore, data collected using questionnaires can be easily quantified, analysed and compared. Questionnaires were more appropriate compared to face-to-face interviews because of the COVID 19 restrictions which discouraged people from having face to face meetings or conversations. The collected data was analysed statistically using the Statistical Package for Social Sciences (SPSS).

#### 4. FINDINGS

##### Biographical Data

Gender	Frequency	F (%)
Male	80	80
Female	20	20

Educational Qualification	Frequency	F (%)
Advanced level & below	45	45
Diploma	33	33
Degree	22	22

Work Experience	Frequency	F (%)
5yrs and Below	40	40
6- 10yrs	25	25

**MANAGERIAL STRATEGIES TO CURB WORKPLACE ACCIDENTS IN SMEs IN THE CONSTRUCTION INDUSTRY  
IN MASVINGO URBAN, ZIMBABABWE**

11yrs and above	35	35
-----------------	----	----

Expectedly for the construction industry, there are more male employees than female employees. Most of the work sections such as bricklaying, plumbing and plastering in the construction industry are dominated by men. In terms of qualifications of the participants, the majority of them had advanced level and below. The SMEs in the construction industry had very few people who had degrees, which is expected since the majority of workers are supposed to be artisans who will be doing the actual construction work. In terms of work experience, the five years and below category dominated all the categories, mainly probably as observed by Nyanga et al (2012) that brain drain crippled the construction industry in Zimbabwe. A number of young professionals always cross the border to South Africa in search of greener pastures thereby leaving the construction industry being manned by newly qualified artisans or unskilled workers.

**4.1 Strategies**

No	Safety strategy	SA %	A %	N %	D %	SD %
1	Prioritizing jobsite safety	43	35	0	11	11
2	Organize & conduct daily safety meetings and site inspection	32	41	2	20	5
3	Hold all key stakeholders accountable	10	49	15	21	5
4	Promote effective communication among staff	35	39	1	12	13
5	Develop an effective site design layout	48	52	0	0	0
6	Reward good safety practices	29	41	0	21	9
7	Organize safety training workshops	38	43	1	15	4
8	Employ appropriately qualified people	34	25	4	27	10

**Key:** SA- Strongly Agree; A – Agree; N – Neutral; D – Disagree; SD – Strongly Disagree

The study revealed that jobsite safety should be given first priority on all the activities of the organization. 78% of the respondents agreed that management should put first priority on the safety of workers since workers are the most precious and important assets of the organization. This implies that job safety should be placed ahead of all the activities of the organization such as cost reduction, timelines and productivity. An employer who demonstrates to workers that their safety is one of his/her

top priority issues or concern wins the hearts of employees. The findings are consistent with Nyanga and Sibanda (2020) who observed that health and safety are some of the key facets and drivers of job satisfaction among employees in all the industries including those operating in armed conflict societies. The advantage of promoting a safe work environment significantly reduces costs that are related to accidents while at the same time improving productivity. Accidents result in the increase of cost overruns and delays in job and task completion. Improving safety at construction sites helps organisations to complete their construction projects within the set timelines since there will be fewer days if any that would be lost due to accidents and injuries of workers. Nyanga and Sibanda (2020) also observed that a well designed and implemented health and safety system which significantly reduces the rate of accidents assist in reducing insurance and indemnity costs. This therefore imply that organizations that invest in job safety are bound to develop a good corporate image and also attract the highly skilled and motivated staff; which in turn translate to higher productivity.

75% of the participants are of the view that organizations should organize and conduct safety meetings/talks and site inspections every day before work commences. Safety meetings work as a reminder of safety issues, principles, guidelines and protocols put in place by the organization, nation and international which employees are expected to uphold so to minimize risk of accidents at workplace. Construction organizations in Zimbabwe are expected by law to hire a health and safety person who is well versed in safety issues in the construction industry, whose main responsibility is to organize safety talks and also enforce the implementation of set safety rules, regulations, policies and protocols. Brief but highly informative safety gatherings before work commences should be held on a daily basis, with all workers being compelled to attend. The meetings help supervisors to go through the tasks scheduled for the day and the dangers that are associated with the day's tasks. Moyo (2006) argued that the agenda of morning talks is to remind workers of all the safety procedures and more importantly outline dangers that are associated with the work scheduled for that particular day. Morning briefings help management to address all the safety concerns raised by workers and other key stakeholders. Management and supervisors should avoid belittling the safety concerns raised workers but keenly follow the arguments and pay attention to all the raised issues. Furthermore, construction sites should be regularly monitored and inspected at least twice a day; preferably before work starts and after work ends. This approach helps to manage all if any safety fears and apprehensions such as tools like shovels, mattocks, trowels and others which will have been left lying around the construction site. The approach also helps to manage damaged equipment by putting it in safe places since they can be hazardous to both workers and visitors. However other scholars (Nyanga & Sibanda 2020) are of the view that construction sites needs to checked and scrutinized throughout the working day for purposes

of identifying any possible threats and risks. Management with the help of health and safety personnel should regularly inspect and monitor workers so as to ensure that they observe safe working rules, regulations and ethics.

The study also revealed that the other strategy that can be employed by management to curb workplace accidents and risks at construction sites is by holding all the key stakeholders accountable. It should be made a culture that it is the responsibility of all the people who visit the construction to ensure that safety policies and principles are adhered to. Both managers and shop floor workers are expected to uphold and follow all the safety procedures put in place by the organization and other key stakeholders such as the government, international institutions like International Labor Organizations (ILO). Managers should always stress the point that unsafe culture, ethic and practices put a number of workers in danger; including those who be religiously following set rules and regulations. Adhering to safety rules protects both workers and the property of the construction company. This shows that all organizations in the construction industry should make all workers accountable for their unsafe acts and practices. The first step to do that is for the organization to ensure that all the health and safety rules and regulations are well and clearly defined and elaborated to all the people ate the construction site and also to those who frequently visit the construction site. Information on the consequences for failing to adhere to the rules should be explicitly explained to all the key stakeholders. The findings are consistent with Reeves (2000) who observed that organizations should also endow workers to communicate and report all hazardous conditions, or unsafe practices done by their coworkers, supervisors, managers and all the people who visit the construction site. Failing to follow safety protocols is tantamount to 'suicide' in the construction site due to the high risk that is associated with the construction industry throughout the world. Every person on the construction site should be empowered to demand a work stoppage for purposes of addressing and fixing all forms of safety issues.

74% participants also indicated that the other strategy for curbing accidents at construction sites is by ensuring that an effective and efficient communication and employee coordination systems are put in place. The organization should put in place various forms of communication network so as to ensure that all the workers and other stakeholders get prompt information in case of a looming disaster or hazard. Alarms to alert people of looming danger can be installed at strategic points. The other mode of communication that can be put in place is by establishing a safety committee that comprises workers from all levels of the construction organization. The main role of the committee would be to enforce the implementation of the safety and accident prevention rules and regulations. Their other role would be to appraise and update the construction company's accident prevention activities, rules and regulations. The committee can also craft construction site specific accident prevention plans during the pre-

construction stages of the construction work; which in turn assist to identify possible hazards and safety worries. The process will also help in the development of a well-coordinated layout of activities and machinery. An accident response team is put in place at the construction site with some basic first aid skills. The development and designing of an effective site design also garnered 80%. This shows that a well-designed layout promotes effective organization and management of organizational activities in a manner that reduces accidents caused by poorly coordinated activities.

Rewards and incentives can also be used to curb accidents at workplaces in the construction industry. Managers should reward workers for following accident prevention and free working practices such as putting on personal protective equipment (PPE), organizing safety meetings. The findings are in sync with several scholars who argued that if workers are given rewards to behave in a particular manner, they will certainly change and behave as the expectation of the person or organization which holds the rewards. This implies that rewards and punishment can be utilized as tools for motivating workers to adhere to safety procedures and protocols. Coupled with rewarding good performers are organizing safety training workshops for workers and other important key stakeholders. Appropriately trained and skilled workers can easily assist the organization to improve its safety culture. It should be noted that for trainings to be effective they should not be a one-off event but should be a continuous process. Ongoing imparting of skills and knowledge goes a long way in making employees better retain the concepts they've been taught. Results (59%) also showed that employing appropriately qualified personnel also assist in managing accidents at workplaces.

## **5. CONCLUSION**

Firstly, the study concluded that accidents at construction sites can be catastrophic and cause serious damages to both humans and property. To minimize workplace instigated accidents that damage both human and property, employers and employees are expected to diligently, effectively and efficiently play their roles of promoting health and safety of workers as espoused in the labour regulations of Zimbabwe. Employers are however, expected to do more to curb the challenge because they hold positions of power and authority and have better financial positions than workers, which are key antecedents to the operationalization of health and safety regulations. Secondly, it was also concluded that developing top-notch accident free culture in the construction industry can assist to curb workplace accidents. Managers and other employees in supervisory positions need to lead by example and also reward workers who religiously follow health and safety rules and regulations. Prioritizing jobsite safety and conducting safety meetings and site inspections every day before work commences are some of

the key strategies that can be employed to reduce the regularity of workplace accidents in the construction industry. Thirdly, the study further concluded that training and development, rewarding workers who adhere to safety rules and regulations, effective communication system within the organization, appropriate and effective design layout are some of the fundamental tools that can be incorporated in curbing the problem of accidents at workplaces in the construction industry. Fourthly, it was concluded that organizations tend to benefit more if they reduce workplace accidents to the barest minimum. Organizations that reduce accidents at their workplaces tend to create good corporate image, promote worker satisfaction and reduce medical and litigation costs, which are all key ingredients to profitability and increase in the value of shares.

## **6. RECOMMENDATIONS**

The following recommendations were proffered;

- The government should explore ways of ensuring that all construction companies comply with local, regional and international health and safety regulations, protocols and ethics because most of the accidents are caused by the failure by either employers or employees to adhere to set rules and regulations.
- SMEs should explore ingenious ways of ensuring that their workers operate in a safe work environment. SMEs need to regularly organize training workshops and onsite-counseling services and meetings so as to arm workers with skills, knowledge and strategies of reducing or avoiding workplace related accidents.
- SMEs should allocate a fund that address health and safety issues which can be used for incentivizing workers for observing and following health and safety regulations.
- Future studies should cover health and safety issues in SMEs in the Mining industry since there are several media reports which suggests that there is an increase in the number of workplace accidents in that sector. Furthermore, future studies need to cover a larger conceptual and geographical area on health and safety issues in the construction industry.

### **Managerial Implications**

The findings of this study have positive managerial implications in that they promote and enhance human capital management excellence, effectiveness and efficiency which in turn instill discipline in workers. Organizational effectiveness and excellence significantly improves the profitability and propel an increase in the value of the shares of the company. Good corporate image promotes employee engagement, organizational citizenship and customer loyalty; hence this study has significant

managerial implications. Furthermore, the reduction in the number of accidents related litigation and medical costs reduces the workload of human resources managers.

## REFERENCES

- Arkson, T. and Hadikusumo, B. W. H (2007). Workplace Safety and Health. *Journal of Construction in Developing Countries*, 12(1): 1-8.
- Armstrong, M. (2010). *Essential Human Resource Management Practice*. London: Kogan Page Publishers.
- Karedza G., Sikwila M.N , Mpfu T and Makurumidze, S. (2014). An Analysis of the Obstacles to the Success of SMEs in Chinhoyi Zimbabwe, *European Journal of Business and Management*, 6(6): 14 -38
- Labour Act Chapter 28:01. Available at <https://www.parlzim.gov.zw>acts>.
- Lahey, B. B. (2009). *Psychology: An Introduction*. New York: Pearson Education.
- Lahey, L. L. (2009). Quality and Safety. <https://www.lahey.org..>
- McSween, T. E. (2003). *The Values Based Safety Process*. New Jersey: John Willey and Sons.
- Marsden, E. (2017). The Henrich or Bird Safety Pyreamid. Retrieved from <https//risk-engineering.org>. On 13/01/2020.
- Nyanga T. Mudhovozi P. Chireshe R. and Maunganidze L. (2012). A survey of Job Saatisfaction of Employees at Higher Learning Institutions in Masvingo, Zimbabwe, *Athropologist* 14(1): 73-79.
- Nyanga T. and Sibanda R. (2019). Impact of Onsite Health Care Centres on Job Satisfaction in Armed Conflict Societies: The Zimbabwean War of Liberation Pespective. *Business Excellence and Management*, 9(3): 47-58.
- Olawale, Olusoga. (2018). Health and Safety Management Practices in the Building Construction Industry in Akure, Nigeria. *American Journal of Engineering and Technology Management*. 3(1): 9-17.
- Tiwari, U. (2014). Employee Morale and its impact on employee efficiency at Jaypee Cement Plant Rewa. *Journal of Research in Management and Technology*. 3(11)? 55-71.
- Spillane, J., & Oyedele, L. (2013). Strategies for Effective Management of Health and Safety in Confined Site Construction. *Australasian Journal of Construction Economics and Building*, 13(4): 50-64. <https://doi.org/10.5130/AJCEB.v13i4.3619>