

Developers' Influence in Health and Safety Committees: A Missing Link on Construction Sites in Kenya

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Abstract

The Occupational Safety And Health Act (OSHA, 2007), was enacted to provide for the safety, health and welfare of all persons lawfully present at work places in Kenya. The Act makes provisions for the contractor to establish health and safety committees (HSCs) whose membership is drawn from the contractor's top management representatives and the employees engaged in the workplaces. The main role of the HSCs is to review the working conditions with a view of identifying inherent risks in the processes and advise the management of probable mitigation measures. Despite the establishment of the HSCs, accidents continue to be reported on small and medium size (SME) construction sites in Kenya, suggesting that the HSCs approach could be ineffective. Therefore, the purpose of this study was to establish an effective strategy for the enhancement of HSCs' performance in construction sites in Kenya. A sample of 153 sites were selected using simple random sampling. A response rate of 82% was achieved. Data were collected via self-administered questionnaires. The findings indicate that the level of performance of HSCs registered a paltry 42% against the expected 100%. Further, 100% of the respondents recommended inclusion of developers in the HSCs as the best approach towards enhanced compliance with OSHA 2007. The most significant developer-related factors were identified as selection of contractors with good record towards health and safety (mean=4.12) and sensitization of stakeholders on best workplace health and safety practices (mean=4.08). The study revealed a significant strong positive relationship (0.639) between the performance of HSCs and the developer-related factors. The study concluded that the developers' influence in the HSCs is indeed a missing link in OSHA 2007 compliance. It recommends amendment of the OSHA 2007 to onboard developers in HSCs to enhance their effective performance on the SME construction sites in Kenya.

Keywords: Developer, health & safety committees, kenya, performance.

INTRODUCTION

The prevalence of unhealthy and unsafe construction projects has resulted in a lot of unnecessary anguish to stakeholders in the built environment in Kenya. As an aftermath to these unhealthy and unsafe occurrences, the government with great zeal instituted measures to exterminate these incidences. One of the measures was the enactment of the Occupation Health and Safety Act of 2007 (OSHA, 2007), in compliance with the requirements of the International Labour Organization convention which requires member states to domesticate the running of H&S matters in their respective jurisdictions (ILO, 2004). OSHA 2007 assigns the H&S responsibilities to contractors and by extension employees in a bipartite arrangement via HSCs. Accordingly, contractors having 20 employees, or more are required to establish HSCs

whose membership is drawn from employees' representatives and contractor's top management.

The National Construction Authority (NCA) reported that the safety and health conditions on construction projects in Kenya are very hazardous and continue to report loss of life and property on regular basis (NCA, 2020). This position is supported by Muiruri (2014), who asserts that in most construction projects in Kenya, there is a general apathy towards OSHA 2007 compliance. This negative attitude coupled with the unwillingness by contractors to obey laws that govern H&S at workplaces, exposes employees to dangerous working conditions. Stakeholders associate dangerous working conditions to reported collapses of buildings in Kenya (Gacheru & Diang'a, 2015) and a study by Otido and Omwenga

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(2019), found that contractors lack commitment towards compliance with regulatory regimes.

Developers sign contracts with contractors to execute projects that meet their specifications. However, these contracts do not specify the role of developers in functioning of HSCs in the implementation phase of the projects. This is contrary to the advisory of the International Labour Organization (ILO, 2004), that national laws incorporate developers in their respective laws as they too have a duty of care towards health and safety (H&S) at their respective workplaces in respect of their contributions in the projects. The United Kingdom responded to the advisory and formulated its own code of practice that encourages involvement of developers in the project implementation phase entitled "Respect for People (RFP)" (HSE, 2013). The RFP approach has resulted in better H&S conditions in their construction sites. Elsewhere in Nigeria, Umeokafor (2018), demonstrates that, despite the uninspiring attitudes of developers about H&S, public developers' dedication and attitudes are superior to those of private developers. The stark contrast between the developer categories, accident investigation and developers reviewing contractors' H&S records during the preconstruction phase emphasizes this.

In most developing countries, large-scale projects have been reported to maintain well-coordinated HSCs programs compared to the small and medium size (SME) projects (Bernstein, 2013). This is no different to the Kenyan case where the big sized construction projects executed by big firms according to NCA classifications, i.e. category NCA 4 to NCA 1 have well-structured HSCs (NCA, 2020). Consequently, these categories report limited or no returns on unsafe and unhealthy incidents unlike the SME contractors' sites in the categories of NCA 8 to NCA 5. The SME category of construction projects have project values ranging between KShs. 10 million and 100 million (1US\$ is equivalent to Kenya shillings 138). Measures must thus be put in place to bring the H&S levels on the SME projects at par with the standards on the NCA 4 to NCA 1 categories. This calls for intervention from a third party to oversight the contractor-employee relationship in the HSCs on the SME contractor sites in Kenya. The developer, who is best suited to arbitrate in the contractor-employee's relationship in the HSCs,

has no existing platform for such intervention because OSHA 2007, has no provisions for the role of developers in the management of HSCs. Indeed, a review of the more than 35 provisions in the OSHA 2007, whose breach would result in a criminal offence punishable in law, bears no provision that refers to the developer in case of violation. All culpabilities, responsibility and obligations are heaped on the contractor (the occupier in this context), who is a mere employee of the developer engaged to execute his wishes. Surprisingly, the developer accords greater emphasis towards product specifications and none towards the contractor's staff well-being. Employees' H&S is thus considered as unnecessary burden that has no value addition to the product being developed (Haupt & Akinlolu, 2021; Kirombo, 2020; Loosemore & Andonakis 2007).

In case of non-compliance, contractors bear full responsibility for acts of omission or commission courtesy to the existing contractual provisions that absolve the developer from any culpabilities arising from accidents that may lead to loss of life/ injury or investments in the implementation phase of the project. This position motivates the developer to take an arm's length approach towards the management of HSCs on the construction sites in Kenya. Moreover, it could render the performance of HSCs ineffective and partly explain the cause of rampant reports of unsafe and unhealthy incidences on the SME contractor sites in Kenya.

Despite Kenya having enacted the OSHA 2007, whose compliance is the basis for H&S at workplaces, the SME contractor sites continue to report cases of unhealthy and unsafe incidences. These incidences have resulted in loss of life and investments (Kirombo, 2020). According to ILO (2013), low compliance with the OSHA 2007 in Kenya, is as a result of insufficient enforcement mechanisms. Those findings have resulted into various approaches being suggested towards enhancing enforcements of the OSHA 2007. Despite adoption of new approaches, the sector continues to record accidents and incidents on construction sites calling for a change in approach. The approach in current use on construction sites in Kenya is the bipartite approach where the sole actors are the contractor and employees through HSCs. The developer despite being a key stakeholder in the project implementation phase

has no significant role in the management of HSCs towards OSHA 2007 compliance on construction sites in Kenya. Further, the level of performance of HSCs in construction sites in Kenya is not only unknown but the developer's influence on such performance has not been established. It is with this understanding that this study sought to establish how the developer could exert effective influence on the performance of HSCs towards enhanced compliance with the OSHA 2007, on the SME contractor sites in Kenya.

The following specific objectives guided this research; to establish the level of performance of HSCs on the SME contractor sites in Nairobi, Kenya; to identify developer-related factors influencing the performance of the HSCs on the SME contractor sites; to explore the relationship between the level of performance of the HSCs and the developer-related factors; and to establish effective strategies for incorporating developers in the enhancement of HSCs performance in construction sites in Kenya. The study hypothesized a significant effect of the developer-related factors on the performance of the HSCs on the SME contractor sites

THEORY

Selection criterion of membership to the HSCs

The Occupational Health and Safety Act (OSHA, 2007), makes provisions for the formulations of HSCs at workplaces. The HSCs consist of safety representatives from the employer (contractor) top management and the workers in the following proportions: (i) In the case of factories or other workplaces which regularly employ between 20 – 100 employees, not less than three safety representatives each from the management and from the workers; (ii) in the case of factories or other workplaces which regularly employ between 100 – 1,000 employees, not less than five safety representatives each from management and the workers; and (iii) in the case of factories or other workplaces which employ 1,000 or more employees, not less than seven safety representatives each from the management and the workers. Most of the SME contractor sites in Kenya fall under the first category of between 20 – 100 employees. For the upper NCA classes, the sites fall under the second category of 100 – 1,000 employees. It is very rare to find construction sites falling under the third category of more than 1,000 employees.

Functions of the HSCs

The functions of the HSCs that ensure compliance to the act in a given work place according to OSHA (2007) are: (i) establishing a schedule of inspections of the workplaces for each calendar year; (ii) conduct safety and health inspections at least once in every three months; (iii) inspect, investigate and make recommendations to the occupier immediately any accident or dangerous occurrence takes place; (iv) identify occupational hazards and cases of ill health among workers at the workplaces and make recommendations to the occupier; (v) compile statistics of accidents, dangerous occurrences, and cases of ill-health as primary data for providing remedial measures, planning and allocation of resources; (vi) investigate complaints relating to workers' health, safety and welfare at the workplace and make recommendations to the occupier on their findings; (vii) advise on the adequacy or otherwise of any safety and health measures for particular hazardous work or activities; (viii) establish effective communication channels on matters of H&S between the management and the workers; (ix) organize such contests or activities necessary for achieving the fulfilment of the mandate of the committees; (x) conduct seminars and workers' education programs and provide information for safety, health and welfare at the workplace; and (xi) carry out any other functions necessary for the promotion of a safe and healthy working environment.

Developer influence towards effective HSCs performance on SME construction sites

A developer is as an organization or individual who commissions the activities necessary for the implementation of a project to meet his specifications after entering into a binding contract with implementing parties (Masterman, 2003). The developer is also the head of the procurement value chain, hence his decisions influence the H&S standards on a construction project (Khoza, 2020). Haywood et al. (2004) further notes that attainment of acceptable H&S standards on a given project will remain elusive if developers have no direct involvement in the project. Other researchers concur. Huang and Hinze (2006), opine that to achieve the ultimate goal of zero tolerance on injuries and accidents at workplaces, developer intervention is a prerequisite. According to Musonda et al. (2009), the successful implementation of H&S on construction projects

is attainable through the influence of developers.

In their paper on the development of causal model on construction accident causation, Suraji et al. (2001), argue that accidents are caused by inappropriate responses to certain constraints and the environment. Consequently, developer responses are actions/inactions in response to constraints that emerge during the implementation of a project. These responses include: mid-way reduction in the project budget, new procurement criteria, alteration in the project scope and specifications, accelerating the project implementation pace or change in project design. All these factors impact on the H&S of the project and are directly influenced by the developer's intervention.

Huang and Hinze (2006), opine that developer intervention is based on prescription, regulations and coercion. They identify financial support, prequalification criterion, safety management, audits, sufficient documentation and safety requirements before bidding as some influencing roles by developers towards H&S on construction projects. According to Umeokafor (2018), developers should invest resources in proactive preventive measures rather than waiting until an accident has occurred to do so. The reactive spending is premised on the assumption that accidents may not take place and hence little investment is provided towards accidents prevention. This assumption makes such developers believe that investment in H&S is unnecessary as it grants no direct gain to the final product.

H&S improvements at workplaces rely essentially on the kind of leadership that developers provide. In addition to leadership, Haupt and Akinlolu (2021) contend that the developer's oversight of H&S matters greatly in the management of safety on building sites. This calls for active participation of developers in the whole project cycle. Developers' leadership calls for clear understanding of issues that concern H&S at the workplaces which inform clarity in the issuance of design briefs and specifications for the implementers of the project. As a result, the developers must carry responsibility for preventing workplace accidents by exercising the utmost care while ordering works, supervising employees, and issuing directives that directly relate to the project specifications (Kirombo, 2020).

Additionally, Huang and Hinze (2006), asserts that developers are responsible for setting the bar in matters H&S in work places. Since the onus of maintaining H&S in a construction site lies with the building contractor by the fact that they are in direct contact with the workers on site, the developer has a duty to put forth conditions regarding the H&S of workers on site during the procurement process. The inclusion of safety requirements in their pre-qualification and tendering processes is a significant demonstration of developers' commitment to having a healthy and safe working environment (Raza, Tayeh and Ali, 2022). A further demonstration can be achieved by a direct involvement in the oversight of H&S activities in the implementation phase of the project. The developer direct intervening role could come in the provision of safety guidelines, requiring a formal safety program, requiring the use of permit systems for hazardous activities, requiring contractors to designate a safety supervisor, and conducting safety audits regularly (Maliha et al., 2021). Additionally, safety must be discussed in meetings and monthly reports between contractors and developers (Umeokafor, 2018).

Communication is further identified as a key component towards the achievement of developer-led H&S initiatives in work places. According to Lingard (2013), developers are in the best position to bring about the much-desired institutional cultural change towards enhanced H&S improvements in workplaces. Budgetary allocations, project objectives, timelines and performance criteria are key developer decisions that have direct influence on H&S of a project. Kirombo (2020) note that developers that actively participate in formulating safety targets, choosing safe contractors, and participating in safety management during the construction implementation phase achieve higher H&S performance. Despite this position, Musonda et al. (2009) opine that developers continue to put emphasis on the traditional project objectives, such as cost, time, and quality, as opposed to H&S considerations.

There is a need for developers to recognize that safety complements quality and quantity of a given project and ultimately developer involvement in safety will lead to a reduction in construction

costs. Though small and medium size developers may not have the resources and expertise to undertake comprehensive H&S interventions, nothing precludes them from enquiring about their contractor's safety performance and checking on the level of safety during project implementation. There is a need for developers to familiarize themselves with the costs of accidents so that they are committed to financially support contractors' efforts to promote H&S in workplaces (Hiltzik, 2021).

According to Huang & Hinze (2006), developers could further contribute to the H&S at workplaces by being involved in a constructability review, selecting safe contractors, incorporating safety requirements in contracts, and being active in managing safety during the construction stage. The American Society of Civil Engineers (ASCE, 2020), in their Policy Statement 350 on Construction Site Safety, states that developers have responsibility for: (i) assigning overall project safety responsibility and authority to a specific organization or individual, (or specifically retaining that responsibility); (ii) designating an individual or organization to develop a coordinated project safety plan and monitor safety performance during construction; (iii) designating responsibility for the final approval of shop drawings and details through contract documents; and (iv) including prior safety performance as a criterion for contractor selection.

The ASCE (2020), recognizes the fact that H&S management has to start right at the approval of shop drawings, detailed design, contractor selection and the implementation phase which all call for developer involvement. According to Davison et al (2006), the South African construction industry identifies the following developer obligations as far as H&S management in workplaces is concerned: (i) prepare H&S specifications and avails the same to prospecting contractors bidding for, or appointed to perform the construction work; (ii) promptly provide the main contractor in writing with any information which might affect the H&S of a person at work; (iii) ensure that tendering main contractors have made provisions for the cost of H&S measures and be reasonably satisfied, before appointing the main contractor, that has the necessary competencies and resources; and (iv) take reasonable steps, including periodic audits (at least monthly), to ensure that a subcontractor

does not execute work which is not in accordance with the main contractor H&S plan or which poses a threat to H&S. Lessons learned from both the American and South African construction industries emphasize on the intervening roles of developers towards acceptable H&S standards at work places. It is noted that indeed the overall responsibility towards H&S is to the developer; only that such responsibility could be delegated to other parties through contractual agreements. Despite such delegation, the developer is still the custodian in the oversighting role that ensures that the delegated persons deliver as per the contract. Continuous monitoring and audits are encouraged to ensure that the working conditions are in tandem with the strategic direction given by the developer. Only contractors who meet the threshold towards OSH good standing and capabilities should be engaged in the works.

The above literature review highlights the crucial role of the developer in the enhancement of H&S on construction projects and suggests that their absence could pose a significant challenge. Consequently, in the face of regular reports of unsafe and unhealthy incidences in Kenya construction industry, the following questions beg answers. What is the level of performance of the HSCs on construction sites in Kenya? What developer influencing factors could pose greatest influence towards enhanced performance of the HSCs? What could be the most effective approach towards enhanced HSCs performance on the SME contractor sites in Kenya? Looking at the continuing number of accidents on the Kenya SME construction sites, could developer involvement in HSCs be the missing link towards reduction of accidents on the Kenya construction sites as is the case in other countries?

RESEARCH METHODS

The study used a quantitative research approach and a survey research design. This approach was chosen to allow for the generalisation of the study's findings. Stratified and simple random sampling methods were used to determine the sample. Data was collected via questionnaires which were physically delivered to the respondents at the sites and later collected. The 250 projects that made up the target population were registered SME projects that were being undertaken in Nairobi by NCA5-NC8 contractors. The projects'

development costs range from KShs 10 million (approximately 70,000 USD) to KShs 100 million (approximately 700,000USD). The projects are as listed in the NCA Nairobi region office register for the financial year 2021/2022 (i.e., 1st July 2021 to 30th June 2022). Data were gathered from a sample of 153 building sites as established using the Yamane (1967) formula as shown below;

$$n = \frac{N}{1 + Ne^2} = \frac{250}{1 + 250(0.05^2)} = \frac{250}{1.625} = 153$$

Where n is the sample size, N is the population from which the sample was drawn and e is the margin of error (0.05).

The respondents comprised of construction site employees, contractors, and developers. Foremen or gang leaders responded on behalf of employees while contractors and developers were represented by site agents (SA) and clerk of works (CoW) respectively. The contractor and employees were selected as respondents because they were the main players in the establishment of HSCs according to OSHA 2007. The inclusion of the developer as a respondent was influenced by literature review that identifies him as a stakeholder that has an effect on H&S at workplaces. The breakdown of the sample size in the various strata together with the response rates has been presented on **Table 1**. Out of the 153 sites, 125 were responsive representing an overall response rate of 82%. This was deemed adequate for data analysis.

The questionnaire had four main sections which were each responded to by one of the three respondents; performance of HSCs (clerk of work/developer), developer-related factors (site agent/contractor), effective ways of involving developers in H&S matters (site agent/contractor), and effect of incorporating the project developer in the HSC management (employee). The rationale behind this was ensuring objectivity in the responses such that a category of respondents would not self-evaluate themselves. This ensured absence of bias in the data collected and improved the validity of the research findings.

The dependent variable was measured using a total of 11 indicators which were presented before

the respondents, who were required to indicate in how many of those aspects their sites were compliant. The performance was then measured as a percentage for each site. The independent variable (developer-related factors) was measured using a 5-point Likert scale. Descriptive statistics and bivariate correlational analysis were carried out using SPSS version 25.

RESULTS

The findings are presented and discussed as follows;

Performance of the HSCs on the SME contractor sites in Nairobi, Kenya

Collated functions HSCs eleven functions according to the OSHA 2007 were used as a basis for the evaluation of their performance on the SME contractor sites. Respondents were required to indicate in how many of those aspects their sites were compliant. The performance was then measured as a percentage for each site. As shown on **Table 2**, it was established that a paltry 15 per cent held HSC meetings as per schedule. Further, only 44 per cent conducted H&S inspections. This is dismal because the OSHA 2007 expects HSCs to hold meetings regularly to evaluate performance and advise the contractor on any risks that require mitigation before resulting into accidents. The overall performance of HSCs was estimated to be 42%. This dismal performance of HSCs suggests that they were ineffective and partly explains the continued poor H&S performance on SME construction sites in Kenya.

Developer-related factors influencing performance of HSCs on SME sites

Using a Likert scale of 1-5, respondents were requested to indicate the extent with which the developer-related factors manifested on their construction sites as presented in **Table 3**. The results established that the top three factors are; engaging contractors with good H&S record (mean=4.12), providing sensitizations on best work place H&S practices (4.08), and formulation of contractual provisions on H&S financing (4.00). The least performed factor was cultivating mutual trust amongst the project stakeholders with a mean of 3.24.

TABLE 1
 Target population and sample size

Stratum	Population	Proportion	Sample size		Response rate
			administered	responded	
NCA5	62	0.254	38	30	79%
NCA6	124	0.496	76	67	88%
NCA7	34	0.136	21	16	76%
NCA8	30	0.120	18	12	67%
Totals	250	1.000	153	125	82%

Source: Author 2022

TABLE 2
 HSCs performance on construction sites in Nairobi

Compliance Requirement	Performance
Representations in HSCs meets OSHA threshold	59%
Management spearheaded establishment of HSCs	58%
Maintained accidents register	50%
Conducted transparent nominations for committee representations	49%
Responds to concerns raised by management and employees on matters H&S at workplaces	44%
Conducts daily safety inspections	44%
Conducts periodical safety Audits	43%
Has a schedule for HSC meetings for the year	42%
Facilitates trainings on H&S in workplaces	35%
Maintained a record of minutes for the past HSC meetings	20%
Held HSC meetings as per schedule	15%
Average performance	42%

Source: Author 2022

TABLE 3
 Developer-related factors influencing performance of HSCs

Description	Mean	Rank
Engaging contractors with good H&S record	4.12	1
Providing sensitizations on best work place H&S practices	4.08	2
Formulation of contractual provisions on H&S financing	4.00	3
Oversighting of engagement of competent employees in HSCs	3.92	4
Establishing continuous improvement strategies in HSCs management	3.56	5
Establishment of clear roles and responsibilities amongst the stakeholders	3.56	6
Developer representation in the H&S committee meetings	3.48	7
Contractual clauses requiring active participation of employees in HSCs	3.28	8
Providing incentives and motivations towards enhanced HSC performance	3.28	9
Cultivating mutual trust amongst the project stakeholders	3.24	10

Source: Author 2022

Relationship between performance of HSCs and developer-related factors

The study explored the significance of the relationship between the performance of HSCs and the developer-related factors. This hypothesis was tested using a bivariate correlational analysis. To achieve this, the eleven indicators of the performance of HSCs were integrated into a single dependent variable by computing their mean. Similarly, the ten developer-related factors were merged into one independent variable. The results of the Pearson's correlation test are presented on **Table 4**. The independent variable was found to have a statistically significant relationship (0.639) with the performance of HSCs.

An effective strategy for incorporating developers in the enhancement of HSCs performance in construction sites in Kenya

Respondents were requested to identify effective ways of incorporating the developers in H&S matters. Membership in the HSCs and involvement in the establishment of HSCs were found to be the most important factors by the respondents with means of 3.37 and 3.33 respectively as shown on

TABLE 4

Correlation between performance of HSCs and developer-related factors

		HSCs performance (dependent)
Developer-related factors (independent)	Pearson Correlation	.639**
	Sig. (2-tailed)	.000
	N	117
		** . Correlation is significant at the 0.01 level (2-tailed).

Source: Author 2022

TABLE 5

Effective developer involvement in enhancing performance of HSCs

Area of Involvement	N	Mean	Std.Dev.
Provision of insurance for the works	123	1.66	1.771
Compliance with other regulatory agencies	124	1.79	1.796
Registration of the work place in compliance with OSHA 2007	123	2.87	1.774
Development of H&S policy	122	2.90	1.458
Provision of all information that have a bearing on the H&S management on the construction project	123	2.97	1.582
Engagement of H&S officers in the project	120	2.98	1.741
Participation in H&S trainings	124	2.98	1.679
Contractual provisions on H&S financing	124	3.17	1.906
Involvement in the establishment of HSCs	124	3.33	1.305
Membership in the HSCs	124	3.37	1.468

Source: Author 2022

Table 5. Contractual provisions on H&S financing were also identified as crucial. An overall mean of 2.80 indicated the great importance of developer involvement in the ten identified areas.

Effect of Involving Developer in HSCs Management

Respondents were asked if they thought incorporating the project developer in the H&S management via their involvement in HSCs would enhance the performance of HSCs and increase compliance to the OSHA 2007 regulations. The results are tabulated on **Table 6**. From the survey, an overwhelming response of 100% confirmed developer involvement in HSCs as a positive influence that could enhance OSHA 2007 compliance on the SME contractor sites in Nairobi, Kenya. The developer wields influence that can be harnessed towards enhanced performance of the HSCs and in turn enhance compliance with OSHA 2007 on the SME contractor sites in Nairobi, Kenya.

TABLE 6
 Effect of incorporating the project developer in the HSC Management

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	115	92.0	92.7	92.7
	No	2	1.6	1.6	94.4
	I Don't Know	7	5.6	5.6	100.0
	Total	124	99.2	100.0	
Missing	System	1	.8		
Total		125	100.0		

Source: Author 2022

DISCUSSION

OSHA 2007 expects HSCs to be an effective tool that enhances H&S at workplaces and being a compliance requirement, 100% functioning of all its parameters is mandatory. The H&S conditions are consequently dependent on the effectiveness of the HSCs as established in work places. 42% performance of the HSCs hence points at a very ineffective approach that is incapable of attaining the compliance levels expected on construction sites.

The finding that only 15% held meetings and 20% had maintained a record of minutes for the past HSC meetings point at an outfit that is disjointed and lacks the necessary impetus to effectively work and attain its mandate. It is in the meetings that trainings are planned and inspections are scheduled to check on the safety and advise the management of any impending risks so that mitigative measures could be taken before hazards mature into accidents that lead to loss of property and even life. In the absence of training, the employees may not be able to effectively play their roles in the HSCs and further, they may not be able to identify risks in the work processes hence exposing themselves and those around them to unsafe and unhealthy conditions in the course of their duties (Kironbo, 2020). As highlighted in the literature, this calls for an external influence that can oversight the contractor/employee relationships in the bipartite HSCs.

The study established that engaging contractors with good H&S record was the most important developer influence factor towards enhanced HSC performance with a mean of 4.12. Developers typically have the obligation and power to pick

who is awarded a contract therefore influencing the H&S management before even the project begins. This collaborates Umeokafor (2018) observation that the developer plays a vital role of incorporating health and safety (H&S) precautions into the project, such as selecting contractors based on their H&S records. Another crucial factor identified in the study was formulation of contractual provisions on H&S financing (mean=4.00). Indeed, Kironbo (2020) observes that adequate funding of H&S operations is critical in ensuring high levels of safety performance in construction projects.

An overwhelming 100% of the respondents noted that involvement of the developer has a positive influence on the performance of HSCs. This is similar to Haupt and Akinlolu (2021) assertion that developers' lack of effective involvement has contributed to the exceptionally high number of accidents that occur on a daily basis in the construction sector. Khoza (2020) further points out that there is consensus among researchers that including developers across all project phases can contribute to improvements in the health and safety performance of construction projects.

CONCLUSION AND RECOMMENDATIONS

This study established that performance of HSCs on construction sites stands at a paltry 42%. This performance is very low considering that this is a compliance requirement that drives OSHA 2007 compliance. Further, since the OSHA 2007 compliance deals with the life of persons at work places, it is expected that work places register 100% compliance. The study established ten roles

that could be played by developers in management of H&S on SME construction sites. The three most important were; engaging contractors with good H&S record (mean=4.12), providing sensitizations on best work place H&S practices (mean=4.08), and formulation of contractual provisions on H&S financing (mean=4.00). This validates the need to incorporate developers in H&S matters and particularly in the management of HSCs. Involvement of the developer will ensure HSCs fulfil their mandate towards compliance with OSHA 2007.

Developers' involvement was further collaborated by its significant strong positive effect (0.639) on the performance of HSCs. This clearly indicates that an increased level of involvement of developers will improve the performance of HSCs and by extension the level of OSHA 2007 compliance on SME construction sites in Kenya.

The three most effective strategies for involving developers in H&S matters were found to be membership in the HSCs (mean=3.37), involvement in the establishment of HSCs (mean=3.33), and contractual provisions on H&S financing (mean=3.17). These represent the most crucial aspects of H&S management where developers need to be involved for improved compliance of OSHA 2007 on SME construction sites in Kenya.

The study recommends amendment to the OSHA 2007 to include developers in HSCs for their effective performance on the SME construction sites in Kenya.

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