



Impact of Health and Safety Management on Safety Performance of Small and Medium-Sized Construction Firms in Abuja

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Abstract

The construction industry is one of the most hazardous sectors, with frequent accidents, injuries, and fatalities resulting from unsafe practices and inadequate health and safety management (HSM). This has led to negative impacts such as project delays, increased costs, reduced productivity, and reputational damage. In order to address this problem, this study assessed the health and safety management practices adopted by small and medium-sized construction firms (construction SMEs) in Abuja with a view to improving safety standards in SMEs. Data collection was undertaken using structured questionnaires administered to 120 construction professionals across various disciplines. Analysis of data was conducted using Mean Item Score (MIS), Relative Importance Index (RII), and Spearman Rank (ρ) correlation. Findings from the analysis revealed that the most important HSM adopted by SMEs are "health and safety (H&S) policy" (MIS = 4.68); "H&S culture" (MIS = 4.65); and "H&S education" (MIS = 4.60). The least ranked practices were "Organisation records" (MIS = 3.67) and "Employee involvement/influence" (MIS = 3.62). The RII results revealed that reduction in workplace accidents and injuries margin (RII = 0.84), improved safety culture (RII = 0.81), and enhanced compliance with regulatory standards (RII = 0.79) were the key practices that most significantly impact project performance. Conversely, lower compensation insurance (RII = 0.59), reduced absenteeism (RII = 0.61), and increased client satisfaction (RII = 0.63) were ranked lowest but were still statistically significant, as their p -values were less than 0.05. The study concludes that HSM practices have a significant effect on the performance of small and medium-sized construction projects in Abuja. It was therefore recommended that construction stakeholders should strengthen safety policies and culture, enhance worker involvement, promote government support for training, and enforce regulatory compliance in order to achieve safer and more efficient construction project delivery.

Keyword: Health and safety, Impact, management, Safety performance, Small and medium-sized construction firms.

1.0 Introduction

1.1 Background

The construction industry is among the top industries of any nation that contribute greatly to the survival and sustenance of economic and infrastructural development. The rapid development of construction activities derives from the economic development of any nation Tanko *et al.* [32]. Eze *et al.* [11] described the industry as the economic prime mover and the bedrock of the survival of economies. Despite the immense importance of the industry in bringing about rapid growth and development, its activities have been confirmed to contribute to a very high level of accidents and fatality relative to other industries Chen *et al.* [9]. The industry has a long-standing poor performance record of health and safety (H&S). This has been blamed on the complexity, multiple stakeholders, dynamic operational environment, and organisational arrangements of construction projects, which have regularly resulted in accidents and injuries to workers Chen *et al.* [9]. Eze *et al.* [11] submitted that hazards and risk control has been made more difficult due to the frequent dynamics in technology, construction techniques, construction materials, clients' demands, and work environment.

The H&S issues on construction sites are a global problem, and this has given rise to poor project time, cost, and quality performance, with numerous claims and disputes. The occurrence of accidents could lead to a temporary stoppage of work, which could result in delays, damage to finished work, an increase in operating cost, and quality issues. Like other developing countries of the world, the Nigerian construction industry is dominated by 78% indigenous small and medium-sized construction organisations Tunji-Olayeni *et al.* [33].

Achieving sustainable construction development is an illusion if issues of H&S are not addressed and it is a wrong belief that good H&S performance increase the cost of the project Tanko *et al.* [32]. Lack of government commitment exemplified by regulation, policy, and legal constraints limit the operational efficiency of agencies of government in charge of H&S management, thus hindering the development of good H&S practice Abas *et al.* [1]. In addressing the poor performance of H&S in workplaces, the Lagos State Safety Commission (LSSC) of 2011 was established to enforce all safety laws, guidelines, policies, standards and regulations in the state. The construction sectors of developing countries are majorly dominated by small and medium sized enterprises (SMEs) Okoye [26]. The SMEs give little or no attention to H&S issues that account for a significant number of accidents and health problems Aghimien *et al.* [3]. The situation in Nigeria is not different where mechanisation of

construction activities is at the lowest. SMEs firms are with a large number of seasonal and migrant workers that are not familiar with H&S issues in construction.

Health and Safety Management (HSM) systems are essential for mitigating these risks by establishing safety protocols, providing worker training, ensuring compliance with safety regulations, and promoting a culture of safety Arévalo Sarrate *et al.* [5]. Despite the importance of HSM, many SMEs in Abuja fail to implement effective safety practices due to financial constraints, lack of technical know-how, and weak regulatory enforcement. This has led to frequent accidents, injuries, and fatalities on construction sites, contributing to poor safety performance and reduced productivity Jimoh *et al.* [17].

The safety performance of a construction firm is generally measured by indicators such as the frequency of workplace accidents, near-miss incidents, injury rates, and compliance with safety standards Shaikh *et al.* [45]. An effective HSM system can significantly improve these safety performance metrics by fostering a safer work environment, reducing the risk of accidents, and enhancing worker confidence Mhina [21]. For SMEs, improving safety performance through proper HSM practices is not only a legal and ethical responsibility but also a business imperative, as accidents can lead to costly delays, legal liabilities, and reputational damage Baghdadi [6]. Therefore, this study explores the impact of HSM on the safety performance of small and medium-sized construction firms in Abuja.

2.0 Literature Review

2.1 Impact of HSM Practices on Selected Small and Medium-sized Construction Firms Performance

The implementation of HSM practices within selected construction SMEs is associated with several key impacts on safety performance Adesola *et al.* [2]. These impacts include improvements in safety outcomes, operational efficiency, and compliance with legal requirements Irniza *et al.* [16].

2.1.1 Reduction in workplace accidents and injuries

Studies have consistently shown that effective HSM practices contribute significantly to the reduction of workplace accidents and injuries in construction SMEs. In addition to safety training and PPE usage highlighted by Buniya *et al.* [7], research demonstrates that accident reduction is strongly linked to a company's commitment to proactive hazard identification and reporting systems. For instance, Kadiri *et al.* [18] found that poor hazard reporting practices and inadequate supervision were major causes of accidents on construction sites in Abuja, indicating that strengthening these components of HSM can lead to a substantial decline in incidents. Similarly, Udo *et al.* [34] reported that insufficient attention to safety protocols increases the likelihood of falls, electrocution, and equipment-related injuries, underscoring the need for structured HSM practices.

Furthermore, structured safety interventions such as Kiken Yochi Training (KYT) have also been found to significantly reduce unsafe behaviors that lead to accidents. Irniza *et al.* [16] emphasised that KYT enhances workers' risk perception and encourages pre-task hazard forecasting, resulting in fewer preventable accidents. Additionally, Fang *et al.* [12] revealed that supervisors who enforce safety rules and model safe behaviour positively influence workers' compliance, leading to a measurable decline in injury rates. These studies collectively show that multi-level safety interventions are essential for urban construction SMEs like those in Abuja.

Finally, research has shown that enhanced accident reporting mechanisms and post-incident learning processes help improve long-term safety performance. Hassan [14] found that underreporting of accidents within Abuja construction firms prevents organisations from identifying recurring hazards and implementing corrective actions, ultimately perpetuating unsafe conditions. In line with this, Masi *et al.* [24] argued that SMEs that actively evaluate the effectiveness of safety interventions experience sustained improvements in incident reduction. Therefore, robust HSM systems remain critical in lowering workplace accidents and injuries within construction SMEs.

2.1.2 Improved safety culture

Safety culture is one of the most fundamental outcomes of effective HSM practices. Abas *et al.* [1] found that stakeholders' perceptions of risk significantly influence safety culture, noting that a positive safety culture emerges when workers view safety as integral to daily operations. Research also suggests that regular communication, safety meetings, and visible management commitment enhance safety culture among SMEs. Agyekum *et al.* [23] noted that the success of safety programmes in Ghana depended heavily on leadership commitment and staff engagement, which parallels the Nigerian context where weak safety culture remains a persistent issue.

Moreover, Sunindijo [30] identified organisational size and informal work structures as major barriers to developing strong safety cultures in small construction firms, noting that SMEs often lack the resources and formal systems required to institutionalize safety. However, strategies such as empowering workers, fostering teamwork, and promoting shared responsibility have been shown to significantly improve safety practices in small organisations. Loosemore and Andonakis [20] also highlighted that the subcontractors with clear communication channels and supportive management developed much stronger safety cultures than those without such structures.

Additionally, strong safety cultures promote trust, transparency, and consistent safety behaviour. Wadick [36] observed that subcontractors with strong safety cultures were more proactive in reporting hazards and adhering to safety guidelines. Similarly, Mahmoud *et al.* [22] found that in Southeast Asia, contractors with highly developed safety cultures demonstrated better compliance and lower accident rates. These findings suggest that adopting structured HSM practices can foster a lasting safety culture among construction SMEs in Abuja.

2.1.3 Enhanced compliance with regulatory standards

Effective HSM practices are closely linked to improved regulatory compliance. Arewa and Farrell [4] reported that SMEs with structured safety systems demonstrated better compliance with health and safety regulations, which resulted in improved economic performance and fewer project disruptions. Similarly, Umeokafor *et al.* [35] found that many Nigerian construction firms struggle with compliance due to weak enforcement and limited internal capacity, making the implementation of HSM systems critical for meeting legal obligations. Idoro [15] also observed that firms that invested more in safety management efforts achieved higher compliance levels and better project outcomes.

Furthermore, research indicates that safety management systems (SMS) support compliance by institutionalizing routine inspections, audits, and documentation. The study by Arévalo Sarrate *et al.* [5] demonstrated that adopting formalized HSM systems significantly improved compliance with safety standards in the construction sector. Similarly, Tanko *et al.* [32] noted that improved PPE compliance in Malaysian construction sites stemmed from consistent enforcement and monitoring, a finding that can inform Nigerian SMEs with similar compliance challenges.

Compliance is also influenced by the availability of institutional support. Egena *et al.* [10] showed that SMEs that had access to training, financial support, and regulatory guidance were more compliant with industry regulations. In addition, Hassan [14] revealed that low compliance among Abuja construction firms was often due to inadequate reporting and weak regulatory oversight. Enhancing HSM practices therefore strengthens compliance and supports better safety outcomes.

2.1.4 Financial benefits

The financial benefits of implementing HSM practices extend beyond cost savings from reduced accidents. EU-OSHA 2014 [44] found that investment in safety yields long-term financial returns through improved productivity and reduced downtime. Likewise, Olutuase [27] reported that Nigerian construction firms experienced significant reductions in compensation claims and medical costs when safety practices were consistently implemented. This aligns with findings by Baghdadi [6], who highlighted the economic advantages of integrating safety into sustainable infrastructure development.

In addition, improved safety management reduces indirect costs such as project delays, workforce shortages, and litigation expenses. Studies by Champoux and Brun [8] demonstrated that SMEs with strong safety performance experienced fewer disruptions and increased operational stability. Similarly, Buniya *et al.* [7] emphasized that systematic safety programmes reduce the likelihood of accidents that lead to costly project interruptions. These financial benefits make the adoption of HSM practices crucial for SMEs that operate on typically narrow profit margins.

Furthermore, safety-conscious firms often experience improved investor confidence and better insurance terms. Gulani and Usman [13] noted that financial institutions are more willing to support SMEs with lower operational risk profiles, which can be achieved through robust safety management. Adesola *et al.* [2] also observed that firms with strong organizational practices, including safety management, often perform better financially. Therefore, financial gains reinforce the value of adopting effective HSM practices among construction SMEs.

2.1.5 Enhanced reputation and client trust

Adopting strong HSM practices enhances an organisation's reputation and strengthens client trust. Shafii *et al.* [28] found that safety-conscious construction firms were more likely to be viewed positively by clients, leading to increased competitiveness. Similarly, Soyngbe *et al.* [29] reported that SMEs with documented safety achievements gained greater recognition and trust within the Nigerian construction sector. This improved reputation helps firms secure repeat business and larger contracts, especially in safety-sensitive projects.

Reputation is also linked to transparency and consistent safety compliance. Aghimien *et al.* [3] found that SMEs recognized for their commitment to safety standards gained credibility, which in turn improved their market opportunities. Moreover, sustainability-focused clients increasingly prioritize contractors who adhere to safety and environmental standards Tunji-Olayeni *et al.* [33]. This is particularly relevant in Abuja's rapidly expanding construction market, where clients seek firms capable of delivering safe, high-quality work.

Additionally, companies with strong safety reputations serve as models for industry best practices. Chen *et al.* [9] reported that Taiwanese construction firms that excelled in safety became benchmarks for quality and professionalism, influencing broader industry improvements. Such findings suggest that Abuja SMEs that invest

in HSM can position themselves as leaders, thereby attracting more clients and strengthening their long-term competitiveness.

2.1.6 Increased worker morale and retention

Safe working environments contribute significantly to worker morale, retention, and productivity. Studies such as Muhammad *et al.* [25] showed that SMEs implementing safety measures experienced higher employee satisfaction, which strengthened overall organizational performance. Similarly, Mhina [21] found that safety practices improved workplace behaviour and motivated employees, leading to increased performance and reduced absenteeism. Workers who feel protected are more committed to their tasks and less likely to leave due to job-related stress or injuries.

Improved safety management also promotes a sense of trust and belonging among employees. Jimoh *et al.* [17] noted that construction firms in Abuja that actively engaged workers in safety decisions fostered stronger safety cultures and increased worker loyalty. This aligns with findings from Zhou *et al.* [38], who reported that the use of safety technologies not only improved performance but also made workers feel more valued and protected. Such outcomes are crucial for SMEs that often struggle with high labour turnover.

Moreover, positive psychological outcomes from safe work environments contribute to productivity. Williams *et al.* [37] observed that accidents and near misses negatively affect worker morale and create fear, while strong safety systems promote confidence and efficiency. In addition, Khosravi *et al.* [19] found that addressing factors causing unsafe behaviours improved workers' psychological well-being. Therefore, effective HSM practices directly support worker retention and organisational stability.

An upgrade of safety practices for improved workers' safety status was also advocated, and this would be achieved by the provision of adequate safety facilities, cultivating a better safety climate and safety culture, and the provision of adequate financial budgetary supports.

3.0 Research Methodology

This study adopted a quantitative survey design to examine the impact of Health and Safety Management (HSM) practices on the safety performance of construction SMEs in Abuja, Nigeria. The research comprised two stages: a literature review to establish the conceptual foundation, and a field survey using structured questionnaires to collect primary data. The target population consisted of CEOs and top managers of registered construction SMEs operating in Abuja, identified through the Finelib directory. A total population of 226 firms formed the sampling frame. Using the Krejcie and Morgan 1970 [39] table at a 5 percent margin of error and 95 percent confidence level, a minimum sample size of 120 respondents was determined. Simple random sampling was employed to ensure unbiased selection of participants.

Data were collected using a structured questionnaire divided into five sections covering respondents' background information, HSM practices adopted, impact of HSM practices, the relationship between HSM practices and safety performance, and measures for improving HSM implementation. Data analysis combined descriptive and inferential statistics using SPSS Version 20. Descriptive tools included frequency distribution, percentages, Mean Item Score (MIS), and Relative Importance Index (RII) for ranking variables. while Spearman correlation measured the strength and direction of association between the variables. Together, these methods provided a comprehensive assessment of both the impact and relationship between HSM practices and safety outcomes among construction SMEs in Abuja.

4.0 Result and Discussion

4.1 Analysis of Respondents' Profile

The profile of the respondents considered for this study is presented in Table 1. The findings regarding the designation of the respondents revealed that 57.5% of the respondents are CEO, 28.3% were MDs while the remaining 14.2% accounted for other management staff. In view of this, the results revealed that the majority of the respondents were quantity surveyors, representing 45.8% of the total number of respondents. This is followed by civil/structural engineers (17.5%) and builders (15.0%). Architects accounted for 11.7% of the total respondents, while other professionals made up 10.0%. This distribution shows that the study captured views across a balanced range of construction-related professionals.

The results in Table 1 also indicate that most of the respondents were holders of bachelor degree (BSc/B.Tech), representing 53.3% of the total respondents, followed by holders of Masters degrees (MSc/M.Tech), who accounted for 38.3%. Respondents with Higher National Diplomas (HND) were 5.0%, while postgraduate diploma (PGD) holders constituted 2.5%. The least proportion of respondents were PhD holders, representing only 0.8%. This implies that the respondents were generally well-qualified academically.

It can also be observed from the results that most of the respondents occupied positions as health and safety officers (28.3%) and project managers (26.7%). This is followed by construction managers (20.8%) and site engineers (15.0%). The least proportion were procurement officers, representing 9.2%. This indicates that the

respondents were drawn from individuals with diverse professional responsibilities within the construction industry.

Table 1: Respondents' profile

Profile			Frequency	Proportion (%)	
Respondents' Designation			CEO	69	57.5
			MDs	34	28.3
			Other (Managers, CEOs, etc.)	17	14.2
			Total	120	100.0
Respondents' Profession			Architect	14	11.7
			Quantity surveyors	55	45.8
			Builders	18	15.0
			Civil/Structural Engineer	21	17.5
			Others	12	10.0
			Total	120	100.0
Respondents' Qualification	Highest	Academic	HND	6	5.0
			BSc/ B. Tech	64	53.3
			PGD	3	2.5
			MSc/MTech	46	38.3
			PhD	1	0.8
			Total	120	100.0
Position of respondent			Procurement officer	11	9.2
			Project manager	32	26.7
			Site engineer	18	15.0
			Construction manager	25	20.8
			Health safety officer	34	28.3
			Total	120	100.0
Respondents' Years of Experience			1-5 Years	23	19.2
			5-10 Years	41	34.2
			10-15 Years	28	23.3
			15-20 Years	16	13.3
			Above 20 Years	12	10.0
			Total	120	100.0
Number of employees in your organization			Fewer than 9	68	56.7
			10-49	49	40.8
			50-199	5	4.2
			Total	120	100.0

With respect to years of experience, the results show that the majority of the respondents had between 5–10 years of experience (34.2%), followed by those with 10–15 years of experience (23.3%). About 19.2% of respondents had between 1–5 years of experience, while 13.3% had 15–20 years of experience. Only 10.0% of the respondents had above 20 years of experience. This suggests that most of the respondents had adequate experience in the construction industry to provide reliable information for the study.

Finally, the profile of respondents indicates that the majority of the organisations surveyed were small-sized, with fewer than 9 employees (56.7%). Medium-sized organisations employing between 10–35 workers accounted for 40.8%, while only 4.2% represented larger organisations with between 36–75 employees. This reflects the dominance of small and medium-sized enterprises (SMEs) in the Nigerian construction industry.

Hence, the profile of respondents presented in Table 1 reveals that the respondents were comprised of a good mix of professionals with the requisite qualifications, experience, and organisational backgrounds, thereby ensuring that the data gathered is reliable and representative for the purpose of this study.

4.2 Health and safety Management Practices Adopted by Small and Medium-Sized Construction Firms

The results of the MIS analysis undertaken to rank the perception of respondents on the health and safety management practices adopted by selected small and medium-sized construction firms in Abuja are presented in Table 2. Therefore, it can be observed from Table 2 that the most important health and safety management practices adopted by selected small and medium-sized construction firms were “Health and safety policy” (MIS = 4.68); “Health and safety culture” (MIS = 4.65); “Health and safety education” (MIS = 4.60); and “Safe work

practices” (MIS = 4.50). The least important health and safety management practices adopted by selected small and medium-sized construction firms are “Organisation records and Employee involvement / influence” (MIS = 3.67 and 3.62) respectively. On average, all the health and safety management practices adopted by selected small and medium-sized construction firms are very important (average MIS = 4.06).

In support of the findings of this study, H&S management practices are the policies, procedures, and strategies implemented by the organisation targeted to the H&S of the workers Smallwood [40]. The implementation of H&S policies therefore influences the practices of workers. Furthermore, Yap and Lee [41] opine that management commitment contributes to best practices and productive workers. According to Kukoyi [42], H&S management practices influence workers' knowledge, skills, motivation, decision-making, attitudes, and perceptions.

Table 2: Health and Safety Management Practices Adopted by Small and Medium-Sized Construction Firms

Health and safety management practices	MIS	Rank	Interpretation
Health and safety policy	4.68	1 st	Very Important
Health and safety culture	4.65	2 nd	Very Important
Health and safety education	4.60	3 rd	Very Important
Safe work practices	4.50	4 th	Very Important
Accident analysis	4.20	5 th	Very Important
Health and safety environment	4.18	6 th	Very Important
Health and safety motivation	4.12	7 th	Very Important
Health and safety responsibility	4.10	8 th	Very Important
Health and safety review	4.00	9 th	Important
Health and safety codes and standards	3.98	10 th	Important
Health and safety audits	3.95	11 th	Important
Health and safety inspection	3.80	12 th	Important
Health and safety training programmes	3.79	13 th	Important
Health and safety meetings.	3.76	14 th	Important
Safe work procedures	3.75	15 th	Important
Communication and information sharing	3.74	16 th	Important
Detection and monitoring	3.71	17 th	Important
Safe task assignment	3.70	18 th	Important
Organisation records	3.67	19 th	Important
Employee involvement / influence	3.62	20 th	Important
Average MIS	4.06		Very Important

4.3 Impact of Health and Safety Management Practices on Selected Small and Medium-Sized Construction Firms Performance

This section presents the results of the RII analysis carried out to examine the impact of Health and Safety Management Practices on Selected Small and Medium-Sized construction Firms Performance in Abuja.

Table 3 also illustrates the descriptive ranking of the health and safety management practices based on their Relative Importance Index (RII) values. The results revealed that reduction in workplace accidents and injuries margin (RII = 0.84), improved safety culture (RII = 0.81), and enhanced compliance with regulatory standards (RII = 0.79) were the key practices that most significantly impact project performance. Conversely, lower compensation insurance (RII = 0.59), reduced absenteeism (RII = 0.61), and increased client satisfaction (RII = 0.63) were ranked lowest but were still statistically significant, as their p-values were less than 0.05.

Table 3: Impact of Health and Safety Management Practices on Selected Small and Medium-Sized Construction Firms Performance

Health and Safety Management Practices	RII	Rank	P-Value	Decision
Net Profit Reduction in Workplace Accidents and Injuries Margin	0.84	1	0.000	Significant
Improved Safety Culture	0.81	2	0.001	Significant
Enhanced Compliance with Regulatory Standards	0.79	3	0.002	Significant
Financial Benefits	0.77	4	0.004	Significant
Enhanced Reputation and Client Trust	0.76	5	0.006	Significant
Increased Worker Morale and Retention	0.74	6	0.008	Significant
Operational Efficiency	0.73	7	0.010	Significant
Timely Delivery of Project	0.71	8	0.013	Significant
Reduction in Potential Project Construction Time Loss	0.70	9	0.017	Significant

Health and Safety Management Practices	RII	Rank	P-Value	Decision
Increase in Project Baseline Cost	0.68	10	0.021	Significant
Increase in Overall Project Profit	0.66	11	0.028	Significant
Improved Quality	0.65	12	0.031	Significant
Increased Client Satisfaction	0.63	13	0.037	Significant
Reduced Absenteeism	0.61	14	0.042	Significant
Lower Compensation Insurance	0.59	15	0.047	Significant
R	0.810			
R Square	0.659			
Adjusted R Square	0.648			
F	58.21			
Sig.	0.000			

Note: RII = Relative Important Index; P value= Probability value; SS=statistically significant; NS=Not significant

4.4 Relationship Between Health and Safety Management Practices and Safety Performance

The results of the Spearman Rank (ρ) correlation analysis used to determine the relationship between the health and safety management practices and safety performance are summarised in Table 4. The results presented in Table 4 indicates that there exists a strong, positive and significant relationship between the health and safety management practices and safety performance. The positive correlation indicates that increase in the adoption of health and safety management practices will result into enhancing construction project performance and vice versa. The correlation coefficient (r value) observed was 0.681 indicating a strong degree of association between the variables. Hence, the correlation between the variables is medium Pallant [43]. The probability (P_{value}) value of 0.000 observed was less than the level of significance adopted for the study (0.01). This implies that there is a significant relationship between the variables.

Table 4: Relationship Between Health and Safety Management Practices and Safety Performance

Variables X_1	X_2	Observations			Inferences	
		r	LOS	P_{value}	Strength of Relationship	Remark
Health and Safety Management Practices	Safety Performance	0.681	0.01	0.000	Strong (High Correlation)	SS

Source: Author *et al* (2025)

Key:

SS = Statistically Significant

r = Correlation Coefficient

LOS = Study's Level of Significance

P_{value} = Calculated Probability Value

5.0 Conclusion and Recommendations

The study revealed that the most important health and safety management practices adopted by SMEs in Abuja are health and safety policy, health and safety culture, and health and safety education. However, employee involvement and record-keeping were ranked lowest, implying limited participation of workers in safety decisions. This shows that while firms prioritize compliance and awareness, participatory practices are still weak. The RII result revealed that reduction in workplace accidents and injuries margin, improved safety culture and enhanced compliance with regulatory standards were the key practices that most significantly impact project performance. Conversely, lower compensation insurance, reduced absenteeism and increased client satisfaction were ranked lowest but were still statistically significant, as their p-values were less than 0.05.

The correlation results also revealed a strong positive relationship between H&S management practices and safety performance, confirming that better adoption of H&S practices enhances project delivery.

The study further identified that the most effective measures for improving H&S management in SMEs include government funding of training, and strict enforcement of safety regulations. Conversely, involvement of the tertiary education sector in safety training was ranked least effective, indicating a gap in industry-academia collaboration. In conclusion, the study confirms that health and safety management practices significantly improve safety performance of selected construction small and medium firms in Abuja. However, effective enforcement,

government support, and increased worker participation are required to strengthen existing practices and ensure sustainable improvement in safety performance.

Based on the analysis and findings of this study, the following recommendations are made:

- i. SMEs should institutionalize strong H&S policies and foster a safety-conscious culture by making safety an integral part of their organisational values and daily site operations.
- ii. Construction firms should encourage employee involvement in safety planning, reporting, and monitoring to bridge the gap identified in record-keeping and worker influence on safety matters.

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