

SAFETY CULTURE AND ACCOUNTABILITY IN GHANAIAI INDUSTRIES: IMPLICATIONS FOR OCCUPATIONAL SAFETY PERFORMANCE

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Abstract

Occupational safety remains a significant concern in Ghanaian industries despite safety training, formal measures, and regulatory requirements. This paper examines the relationship between safety culture, safety accountability, and occupational safety performance, focusing on leadership commitment, employee involvement, risk reporting, and safety communication. A document-based research design was adopted, drawing on peer-reviewed literature, scholarly books, occupational safety guidelines, and empirical studies from Ghanaian industrial settings. Evidence was analyzed through thematic synthesis to identify organizational and behavioural factors influencing safety performance. Findings indicate that safety performance is shaped not only by technical controls and individual behaviour but also by organizational conditions that determine how safety expectations are prioritized, communicated, implemented, monitored, reported, and owned. Leadership commitment strongly influences safety beliefs and behaviours, although weak supervision and monitoring remain challenges. Employee involvement is equally critical, while inadequate hazard awareness, risk-taking, and disregard for personal protective equipment continue to undermine safety performance. Weak risk reporting limits organizational learning, whereas effective communication improves safety knowledge and compliance. Safety accountability provides a mechanism for translating safety culture into action through responsibility, reporting, investigation, learning, and corrective measures. The paper concludes that safety culture and accountability are mutually reinforcing components of occupational safety. Ghanaian industries should adopt an integrated approach emphasizing visible safety leadership, employee participation, effective hazard and near-miss reporting, open communication, non-punitive accountability, and the institutionalization of safety culture to promote shared responsibility, proactive risk management, organizational learning, and continuous improvement.

Keywords: *Safety culture, Safety accountability, Occupational safety performance, Safety leadership, Employee involvement, Risk reporting, Safety communication, Ghanaian industries*

Introduction

Workplace safety remains a critical concern in hazardous and technologically intensive environments, where unsafe conditions can result in injuries, fatalities, property damage, and substantial organizational and economic costs. Safety

training is widely recognized for improving employees' knowledge, hazard awareness, skills, and compliance with safety procedures (Namian *et al.*, 2016; Ricci *et al.*, 2016). However, effective occupational safety extends beyond technical training and formal safety

measures. Safety performance is also shaped by organizational factors, including leadership, shared values, communication, employee participation, and behavioural expectations (Cooper, 2000; Fernández-Muñiz *et al.*, 2007; Otitolaiye *et al.*, 2021). Evidence from Ghana similarly indicates that workplace accidents are influenced by organizational and cultural conditions as well as technical and individual factors (Stemn, 2019; Stemn *et al.*, 2019).

This issue is particularly important in Ghana, where occupational injuries and fatalities continue to occur across sectors such as agriculture, mining, manufacturing, construction, and electricity. In the Tema industrial enclave, Asiedu *et al.* (2024) reported substantial occupational injuries associated with dissatisfaction with health and safety measures and inadequate safety training, while the construction industry continues to experience significant hazards and accidents (Osei-Asibey *et al.*, 2021). These persistent outcomes suggest that the existence of formal safety interventions does not necessarily translate into effective safety performance. Rather, occupational safety should be understood as a broader organizational and cultural phenomenon in which safety is prioritized, communicated, implemented, and sustained.

Safety culture is therefore central to understanding occupational safety performance. It reflects the shared beliefs, attitudes, values, perceptions, and behavioural patterns through which safety is understood and practiced within an organization (Cooper, 2000; Fernández-Muñiz *et al.*, 2007). A strong safety culture promotes hazard awareness, reporting, organizational learning, participation, and continuous improvement, moving

organizations from reactive approaches toward proactive and generative safety practices (Reason, 1995; Foster and Hoult, 2013; Hudson, 2007). Importantly, safety training alone does not guarantee the application of safety knowledge in daily work; the organizational environment must reinforce and support the translation of training into safe behaviour (Namian *et al.*, 2016; Ricci *et al.*, 2016).

Evidence from Ghanaian industries highlights four interconnected dimensions of safety culture: leadership commitment, employee involvement, risk reporting, and safety communication (Yeboah *et al.*, 2025; Williams *et al.*, 2020; Ismail, 2015; Esseh *et al.*, 2022). Leadership commitment influences safety beliefs and behaviours through management actions, resource provision, supervision, and communication of safety expectations, although weak supervision and inadequate monitoring remain concerns in the construction industry (Osei-Asibey *et al.*, 2021). Employee involvement is equally important because workers translate safety requirements into everyday practices; evidence indicates that inadequate hazard awareness, risk-taking, and disregard for personal protective equipment remain challenges, although positive safety behaviour can be strengthened by safe working conditions, leadership, and job satisfaction (Danso *et al.*, 2024; Howard Quartey, 2017). Risk reporting enables organizations to identify hazards, learn from incidents, and prevent recurrence, yet evidence of pathological safety-culture maturity among some Ghanaian contractors indicates weaknesses in safety reporting (Williams *et al.*, 2020). Similarly, effective safety communication improves safety knowledge and compliance, whereas barriers to communication may prevent employees

from raising safety concerns (Ismail, 2015; Esseh *et al.*, 2022).

While safety culture establishes the organizational conditions for safe behaviour, safety accountability translates these conditions into responsibility, action, and ownership. Accountability requires managers and employees to take responsibility for safety-related decisions and practices and to report, investigate, and learn from accidents and near misses (Asumeng *et al.*, 2015; McCall and Pruchnicki, 2017; Nadeem *et al.*, 2022). It should not, however, be equated with punishment or blame. Punitive approaches may discourage reporting and weaken organizational learning, whereas a just-culture approach balances responsibility with learning from safety failures and system weaknesses (Dekker, 2012). Thus, accountability can reinforce safety culture by encouraging shared responsibility for identifying hazards, following procedures, reporting risks, and implementing corrective actions.

Despite growing research on occupational safety in Ghana, existing evidence remains relatively fragmented across individual issues such as injuries, safety behaviour, leadership, communication, construction hazards, and safety-culture maturity (Asiedu *et al.*, 2024; Danso *et al.*, 2024; Esseh *et al.*, 2022; Osei-Asibey *et al.*, 2021; Williams *et al.*, 2020). Less attention has been given to how these dimensions interact, particularly how safety culture and accountability jointly influence occupational safety performance. This paper addresses this gap by examining leadership commitment, employee involvement, risk reporting, safety communication, and accountability as interconnected organizational dimensions

of safety performance in Ghanaian industries.

The paper, therefore, examines safety culture and accountability in Ghanaian industries and their implications for occupational safety performance. Specifically, it examines safety leadership challenges, identifies key safety-culture dimensions, assesses how safety practices are applied and owned through accountability, and considers their implications for occupational safety performance. By integrating these dimensions, the paper provides a basis for moving beyond a predominantly compliance-oriented approach toward one characterized by shared responsibility, organizational learning, proactive risk management, and continuous improvement.

Methodology

Research Design

This study adopted a document-based research design to examine safety culture and accountability in Ghanaian industries and their implications for occupational safety performance. The design involved the systematic use of existing documentary information on occupational safety issues, which was collected, reviewed, and interpreted to identify evidence relevant to safety culture, accountability, and safety performance. The approach was appropriate for the study because the objective was to synthesize existing evidence on organizational and behavioural dimensions of occupational safety rather than to generate primary data from workers or organizations.

The document-based design also enabled the study to bring together evidence from different Ghanaian industrial contexts, including

construction, mining, oil and gas, beverage manufacturing, printing, electricity, and other workplaces where occupational safety concerns have been documented. This cross-industry perspective was important because the paper focuses on safety culture and accountability as organizational phenomena that may manifest through common dimensions across different industrial settings.

Sources of Information

The study drew on peer-reviewed literature, scholarly books, and relevant occupational safety guidelines, including United States Occupational Safety and Health Administration (OSHA) guidance on safety training. The peer-reviewed literature provided evidence on occupational injuries, safety performance, safety culture, safety behaviour, leadership, employee involvement, risk reporting, safety communication, and accountability, with particular emphasis on studies conducted in Ghanaian industries.

Conceptual and empirical literature on safety culture, safety maturity, just culture, safety management, and accountability were also consulted to provide the theoretical and analytical foundation for the study (Cooper, 2000; Dekker, 2012; Fernández-Muñiz *et al.*, 2007; Nadeem *et al.*, 2022; Reason, 1995). Scholarly books supported the conceptual understanding of safety culture and accountability, while OSHA guidance provided a relevant reference for safety-training practices. Collectively, these sources enabled the study to contextualize evidence from Ghanaian industries within established occupational safety and organizational safety frameworks.

Scope of the Literature Reviewed

The literature review focused on occupational safety in Ghanaian industries, with particular emphasis on the organizational and behavioural factors influencing safety performance. It covered safety culture, safety behaviour, leadership, employee involvement, risk reporting, safety communication, and safety accountability across sectors including construction, mining, oil and gas, beverage manufacturing, and printing.

Particular attention was given to four key dimensions of safety culture: leadership commitment, employee involvement, risk reporting, and safety communication. The review examined how leadership shapes safety beliefs and behaviours; how employee involvement influences safety practices and risk-taking; how risk reporting supports hazard control and organizational learning; and how safety communication affects safety knowledge, compliance, and employees' ability to raise safety concerns.

Safety accountability was examined as a complementary organizational dimension, focusing on responsibility for safety-related activities, accident and near-miss reporting and investigation, corrective action, and shared ownership of workplace safety. Consistent with the paper's conceptualization, accountability was treated not as a punitive mechanism but as an organizational process through which safety responsibilities are accepted, communicated, implemented, and reinforced.

The paper also considered the persistence of occupational injuries and fatalities despite formal safety measures and training. Evidence from the Tema industrial enclave, construction industry, and other Ghanaian sectors was therefore

incorporated to provide the broader context for understanding how safety culture and accountability influence occupational safety performance.

Analytical Approach

The documentary evidence was analyzed using thematic synthesis, whereby findings from the reviewed literature were organized and interpreted around the principal themes relevant to safety culture, accountability, and occupational safety performance. The analysis focused on four key safety-culture dimensions: leadership commitment, employee involvement, risk reporting, and safety communication. For each dimension, the evidence was examined in terms of its manifestation in Ghanaian industries and its implications for safety behaviour and performance.

Safety accountability was subsequently analyzed as a complementary dimension, with emphasis on the distribution and ownership of safety responsibilities, reporting and investigation of accidents and near misses, organizational learning, and corrective action. Consistent with the concept of just culture, accountability was interpreted as a proactive mechanism for promoting responsibility and safe behaviour rather than as a punitive response to safety failures (Dekker, 2012; McCall and Pruchnicki, 2017; Nadeem *et al.*, 2022).

The identified themes were then interpreted in relation to occupational safety performance, including accident and injury outcomes and broader organizational safety practices (He *et al.*, 2012; Otitolaiye *et al.*, 2021). This enabled the analysis to assess how safety culture and accountability may reinforce or constrain safety practices across Ghanaian industrial settings.

The study did not employ statistical analysis, primary-data modelling, or formal meta-analysis. Rather, the findings represent a structured thematic synthesis of the documentary evidence contained in the reviewed literature and capstone. This approach provides an integrated interpretation of the relationships among safety culture, accountability, and occupational safety performance without attributing empirical or statistical procedures that were not undertaken.

Results and Discussion

The synthesis of evidence from the reviewed literature indicates that occupational safety performance in Ghanaian industries is influenced by a combination of organizational, behavioural, and cultural factors rather than by technical safety measures alone. Five interrelated themes emerged from the evidence: leadership commitment, employee involvement, risk reporting, safety communication, and safety accountability. These themes demonstrate that the effectiveness of safety practices depends substantially on how safety is prioritized by leadership, understood and enacted by employees, communicated across organizational levels, reported when hazards occur, and owned through individual and collective accountability. The findings are discussed below.

Leadership Commitment and Safety Culture

The evidence indicates that leadership commitment is a central component of safety culture because managers and supervisors have considerable influence over employees' safety beliefs, attitudes, and behaviours. Leadership can shape organizational safety culture through the provision of safe equipment, establishment of clear safety policies and

procedures, communication of safety information, and demonstration of appropriate safety practices. This is consistent with the broader view that safety culture reflects shared organizational values, perceptions, attitudes, and patterns of behaviour concerning safety (Cooper, 2000; Fernández-Muñiz *et al.*, 2007).

Evidence from Ghana's oil and gas sector illustrates the positive role that responsible leadership can play in shaping workplace safety. Yeboah *et al.* (2025) found that responsible leadership influenced fuel attendants' safety beliefs, attitudes, and practices positively. In the context examined, managers influenced employees by providing safe equipment, establishing clear safety policies and procedures, and sharing safety information. These findings suggest that leadership commitment is not adequately demonstrated merely through the existence of formal safety policies; rather, employees' perceptions of management commitment are influenced by the extent to which leaders translate safety expectations into visible organizational practices.

The influence of leadership is also evident through managerial supervision and monitoring. Osei-Asibey *et al.* (2021) identified poor supervision and inadequate monitoring of employees' compliance with safety measures as a safety concern in the Ghanaian construction industry. This finding is important because safety rules and procedures require organizational oversight if they are to become consistent workplace practices. Where supervision is weak, employees may interpret safety requirements as having limited organizational priority, potentially

weakening compliance and encouraging unsafe practices.

Safety leadership is therefore closely connected to safety communication. Leaders influence safety culture partly through the way they communicate safety expectations and engage employees in discussions about workplace risks. The evidence suggests that effective leadership requires more than issuing instructions; it involves creating conditions in which employees understand safety expectations, observe leaders modelling safe practices, and receive relevant safety information. This is consistent with evidence that leadership and safety motivation are connected through employees' attitudes, norms, and perceived behavioural control (Sawhney and Cigularov, 2019).

The evidence indicates that leadership commitment can either reinforce or weaken safety culture. Where leaders demonstrate visible commitment, provide appropriate safety resources, communicate safety expectations, and monitor compliance, they create conditions conducive to positive safety behaviours. Conversely, weak supervision and limited management involvement may undermine safety practices. Leadership should therefore be understood as an active organizational mechanism through which safety culture is established and sustained rather than as a purely administrative function.

Employee Involvement and Safety Behaviour

The findings further indicate that employee involvement is an important dimension of safety culture because employees are directly involved in workplace activities and their decisions and behaviours can either reduce or increase exposure to occupational

hazards. A positive safety culture therefore requires employees to participate actively in safety procedures rather than viewing safety exclusively as a management responsibility.

Evidence from Ghanaian construction sites reveals important challenges concerning workers' knowledge, attitudes, and risk-taking behaviour. Danso *et al.* (2024) found that some construction workers were unaware of the dangers associated with contaminants in working materials and consequently engaged in practices such as painting without appropriate masks or gloves. Other workers were aware of the risks associated with their activities, including the possibility of falling from heights when erecting roof trusses without fall-arrest systems, but nevertheless continued to take risks. These findings demonstrate that unsafe behaviour may arise from both inadequate hazard awareness and the failure to translate risk awareness into preventive action.

The evidence also indicates that individual behaviour can be influenced by broader beliefs and workplace conditions. In the study reviewed by Danso *et al.* (2024), some workers relied on the belief that God would protect them from injuries when engaging in risky activities. Within the context of occupational safety, such behaviour illustrates the importance of understanding workers' perceptions and attitudes when designing safety interventions. Simply providing technical information about hazards may not be sufficient where workers' established beliefs and behavioural patterns encourage continued risk-taking.

Compliance with personal protective equipment (PPE) requirements provides another illustration of the employee-involvement challenge. Osei-Asibey *et al.*

(2021) identified disregard for safety precautions, including the use of PPE, as a negative safety behaviour in Ghana's construction industry. Such practices may reduce the effectiveness of formal safety systems because organizational measures depend ultimately on their implementation in daily work activities.

However, the evidence does not suggest that employees are inherently resistant to safety. Howard Quartey (2017), examining safety behaviour in Ghana's beverage manufacturing industry, found that employees perceived their own safety behaviours positively and that such behaviours were strongly and positively influenced by organizational factors including safe working conditions, organizational leadership, and job satisfaction. This finding is particularly important because it demonstrates that employee safety behaviour is not simply an individual characteristic. Instead, it can be shaped by the organizational environment in which employees perform their work.

The combined evidence therefore suggests that employee involvement should be approached as both a behavioural and organizational issue. Workers need adequate knowledge of hazards and appropriate safety skills, but they also need an organizational environment that encourages participation, supports safe behaviour, and reinforces personal responsibility. Consequently, improving safety performance requires organizations to move beyond instructing employees to "work safely" toward creating conditions in which employees are actively involved in identifying, discussing, reporting, and managing safety risks.

Risk Reporting and Safety Culture

Risk reporting emerged as another important dimension of safety culture because the identification and communication of hazards, accidents, and near misses provide organizations with opportunities to learn and prevent recurrence. The evidence reviewed in capstone indicates, however, that weaknesses in safety culture can severely constrain risk reporting.

Williams *et al.* (2020), in their assessment of health and safety culture maturity among Ghanaian contractors, found that the contractors examined were at the pathological stage of safety-culture maturity. At this stage, safety was not adequately integrated into site activities and safety issues were not reported. This finding represents a significant weakness because the absence of reporting prevents organizations from obtaining information about hazards and unsafe conditions that could otherwise be addressed before they result in injuries or fatalities.

The finding can be interpreted as a chain through which organizational culture affects safety performance:

Weak safety culture → inadequate risk reporting → limited organizational learning → persistence of hazards → poorer safety performance.

This relationship is consistent with the safety-culture maturity perspective developed by Westrum (1993) and extended by Hudson (2007), which places organizations on a continuum from pathological approaches, where safety responsibility is poorly developed and reporting is avoided, to generative approaches, where safety is integrated into organizational activities and actively supported at all levels. The Ghanaian evidence concerning contractors operating at the pathological level therefore suggests

that weaknesses in organizational safety culture can limit the capacity of organizations to learn from workplace risks.

Risk reporting is particularly important because accidents and near misses can recur if their underlying causes are not identified and addressed. Asumeng *et al.* (2015) emphasize the importance of reporting and investigating accidents and narrowly avoided accidents that result, or have the potential to result, in injury. Such reporting should occur without placing the employee who reports the incident in jeopardy. This requirement reinforces the connection between risk reporting and organizational culture: employees are more likely to report safety concerns when the organizational environment supports reporting rather than treating it primarily as a basis for blame.

The findings therefore suggest that risk reporting is not merely a procedural requirement. It is an indicator of the extent to which an organization has developed an environment that supports openness, learning, and responsibility. Where workers do not report hazards or near misses, management may have an incomplete understanding of actual workplace risks, limiting the organization's ability to undertake preventive action. Strengthening risk reporting consequently requires not only reporting systems but also a safety culture that encourages employees to use those systems.

Safety Communication and Safety Performance

Safety communication constitutes a further mechanism through which organizational culture influences safety behaviour and performance. Effective communication allows safety-related information to move between

management, supervisors, and employees and enables workers to understand hazards, safety requirements, and appropriate preventive measures. The evidence reviewed demonstrates both the positive effects of effective safety communication and the consequences of communication barriers within Ghanaian industries.

Evidence from a multinational gold mining company in Ghana indicates that safety communication positively influenced safety behaviour by increasing employees' safety knowledge and improving compliance with safety standards (Ismail *et al.*, 2015). This finding suggests that communication can contribute to safety performance by ensuring that employees receive and understand relevant safety information. Communication is therefore not simply a mechanism for disseminating rules; it can influence the knowledge and behaviours required for compliance with safety standards.

The positive relationship between communication and safety behaviour also reinforces the role of leadership. Managers and supervisors are important sources of safety information, and their willingness to communicate openly about safety issues can influence how employees perceive the organizational priority given to safety. Effective communication may therefore strengthen the connection between leadership commitment and employee safety behaviour. However, evidence from Ghana's printing industry indicates that communication does not always function effectively. Esseh *et al.* (2022) found that employees experienced difficulty discussing safety issues with supervisors and recommended that management change its attitude toward safety and

improve communication. This finding reveals an important organizational barrier: even where employees may identify safety problems, the absence of open communication channels can prevent those concerns from reaching individuals capable of addressing them.

The contrast between the mining and printing evidence is particularly informative. In the mining context, effective safety communication was associated with increased safety knowledge and compliance, whereas communication difficulties in the printing industry restricted employees' ability to discuss safety concerns. Thus, the effectiveness of communication depends not simply on whether safety information is transmitted but on whether communication is open, accessible, two-way, and supported by management.

The findings indicate that safety communication is closely linked to both safety culture and safety performance. Effective communication can strengthen safety knowledge, encourage compliance, facilitate reporting, and reinforce organizational safety expectations. On the other hand, communication barriers can suppress employee participation and prevent organizations from identifying and addressing safety concerns. Safety communication should therefore be regarded as a central organizational component of safety performance rather than merely a training or information-dissemination activity.

Safety Accountability

Safety accountability emerged as a critical mechanism connecting safety culture with actual workplace practice. The evidence indicates that a safety programme is unlikely to be effective without accountability because safety expectations must ultimately be translated

into individual and organizational responsibility (Nadeem *et al.*, 2022). Accountability becomes particularly important when workplace conditions change and managers and employees must take responsibility for adapting safety practices accordingly.

A fundamental feature of safety accountability is responsibility for safety-related actions and decisions. Accountability requires individuals to explain and take responsibility for their behaviour and can therefore contribute to shaping organizational behaviour (McCall and Pruchnicki, 2017). In an occupational safety context, this means that managers and employees must recognize their respective responsibilities for maintaining safe work practices rather than treating safety as the exclusive responsibility of safety officers or senior management.

Accident and near-miss reporting represent an important practical expression of this responsibility. The evidence emphasizes the importance of reporting and investigating accidents and narrowly avoided incidents because such events may recur when their causes are not examined (Asumeng *et al.*, 2015). Accountability therefore extends beyond identifying who was involved in an incident. It requires organizations to establish what happened, why it happened, what can be learned, and what changes are necessary to prevent recurrence.

This distinction is important because accountability should not be confused with punishment. The capstone explicitly presents safety accountability as a proactive means of developing a culture of responsibility rather than as a punitive strategy (Mlynek, 2020). This position is consistent with the concept of just culture, which seeks to balance accountability for

safety-related behaviour with learning from mistakes and system weaknesses (Dekker, 2012). A purely punitive approach may discourage employees from reporting errors, hazards, and near misses, thereby weakening organizational learning. By contrast, an appropriate accountability system can encourage responsible behaviour while maintaining an environment in which safety information is openly communicated.

The evidence also indicates that accountability creates a sense of obligation among employees to perform safety-related tasks effectively and efficiently (Nadeem *et al.*, 2022). This obligation is particularly important where safety procedures depend on employees' day-to-day decisions. Accountability can reinforce the expectation that workers should identify hazards, follow safety procedures, report risks, and take responsibility for the consequences of their actions and inactions.

Safety accountability extends beyond individual responsibility to shared responsibility. Employees operating within a positive safety culture may feel responsible not only for their own safety but also for the safety of their colleagues, resulting in shared positive behaviour toward adherence to safety standards (Yeboah *et al.*, 2025). This provides an important link between accountability and safety culture: safety becomes an organizational value when responsibility is distributed across management and employees rather than concentrated in a single organizational role.

The relationship between accountability and safety performance can therefore be conceptualized as a reinforcing process. Leadership establishes safety expectations and provides organizational support;

employees participate in implementing safety practices; workers report hazards, accidents, and near misses; organizations investigate and learn from these events; and individuals and managers assume responsibility for corrective action. When these processes operate together, accountability can strengthen the practical expression of safety culture and contribute to improved safety performance. On the other hand, weak accountability can allow unsafe practices to persist even where formal safety policies and training programmes exist.

Integrated Interpretation of Safety Culture, Accountability and Safety Performance

The evidence across the five themes indicates that safety culture and accountability are not independent components of occupational safety management. Rather, they operate as interconnected organizational mechanisms. Leadership commitment establishes the conditions for a positive safety culture; employee involvement translates organizational expectations into workplace behaviour; risk reporting provides information about hazards and incidents; safety communication facilitates the movement and discussion of safety information; and accountability ensures that individuals and organizations take ownership of safety responsibilities.

This interpretation helps explain why occupational injuries may continue despite the existence of formal safety measures and training programmes. Safety training can improve knowledge and skills, but the transfer of knowledge into workplace practice depends partly on organizational conditions. Where leadership commitment is weak, employees may receive limited reinforcement for safe practices. Where

employee involvement is low, workers may continue to take risks or disregard safety procedures. Where risk reporting is weak, organizations lose opportunities to identify hazards and learn from near misses. Where communication is restricted, employees may be unable or unwilling to raise safety concerns. Finally, where accountability is absent or interpreted primarily as punishment, individuals may avoid reporting mistakes and organizations may fail to learn from safety failures.

The findings consequently support a broader understanding of occupational safety performance in Ghanaian industries. Safety performance should not be viewed solely as the outcome of technical controls or individual compliance; it is also an organizational outcome shaped by the culture through which safety is prioritized and the accountability mechanisms through which safety responsibilities are enacted. This interpretation is consistent with the evidence that safety culture is an important qualitative aspect of safety performance and that organizational factors influence workplace safety outcomes (Otitolaiye *et al.*, 2021; Stemn *et al.*, 2019).

The evidence synthesized in Table 1 demonstrates that the four major dimensions of safety culture identified in Ghanaian industries produce different but interconnected effects on workplace safety. Leadership establishes the organizational direction for safety; employee involvement determines how safety expectations are enacted; risk reporting determines the extent to which organizations can identify and learn from hazards; and safety communication determines how effectively safety knowledge and concerns circulate within

the organization. Safety accountability cuts across all four dimensions by establishing responsibility for implementing, reporting, communicating, and learning from safety-related activities. The combined evidence therefore indicates that improving occupational

safety performance requires an organizational approach in which culture and accountability reinforce one another rather than treating safety as a narrow matter of individual compliance or technical training alone.

Table 1: Safety Culture Elements and Evidence from Ghanaian Industries

Safety-culture element	Industry	Key finding	References
Leadership commitment	Oil and gas	Responsible leadership positively influenced fuel attendants' safety beliefs, attitudes, and practices.	Yeboah <i>et al.</i> (2025)
Leadership commitment	Construction	Poor supervision and monitoring of employees' compliance with safety measures were identified as safety concerns.	Osei-Asibey <i>et al.</i> (2021)
Employee involvement	Construction	Workers demonstrated ignorance of some hazards and engaged in risk-taking behaviours; some continued risky practices despite awareness of hazards.	Danso <i>et al.</i> (2024)
Employee involvement	Construction	Workers disregarded safety precautions, including the use of personal protective equipment.	Osei-Asibey <i>et al.</i> (2021)
Employee involvement	Beverage manufacturing	Employees reported positive safety behaviours that were strongly influenced by safe working conditions, organizational leadership, and job satisfaction.	Howard Quartey (2017)
Risk reporting	Construction	Contractors were assessed at the pathological stage of safety-culture maturity, with safety issues not adequately reported.	Williams <i>et al.</i> (2020)
Safety communication	Mining	Safety communication positively influenced safety behaviour through increased safety knowledge and compliance with safety standards.	Ismail <i>et al.</i> (2015)
Safety communication	Printing	Employees experienced difficulty discussing safety issues with supervisors, indicating communication barriers.	Esseh <i>et al.</i> (2022)

Conclusion and Recommendation

This study concludes that occupational safety performance in Ghanaian industries is shaped not only by technical controls and individual behaviour but also by the organizational environment in which safety is prioritized, communicated, implemented, and sustained. Leadership commitment,

employee involvement, risk reporting, safety communication, and accountability are interconnected dimensions that collectively influence safety performance. Visible leadership provides direction, resources, supervision, and role modelling, while employee participation strengthens hazard identification, compliance, and shared responsibility.

Effective reporting and open communication further support organizational learning and proactive risk management.

Safety culture and accountability are mutually reinforcing: a supportive culture encourages responsibility, while accountability translates responsibility into action through reporting, investigation, learning, and corrective measures. Accountability should therefore emphasize learning and prevention rather than blame or punishment.

Accordingly, Ghanaian industries should adopt an integrated and proactive approach by strengthening visible safety leadership, increasing employee participation and safety ownership, establishing accessible and non-retaliatory hazard, accident, and near-miss reporting systems, promoting open two-way safety communication, and implementing learning-oriented accountability mechanisms. These principles should be institutionalized across safety policies, training, supervision, reporting, communication, and performance management to support a shift from reactive compliance toward shared responsibility, continuous learning, proactive risk management, and sustained safety improvement.

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