

Literature Review: Improving health and safety in the construction industry through cultural transformation

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Abstract: The construction industry require a different approach to their management of health and safety in the workplace from the functional hierarchical line management approaches adopted to connecting with employees on floor level who are executing projects. The study suggests a cultural transformation approach in creating safety as a value, rather than a priority. Organisations that successfully create high performing committed employees who share the same culture and values that aligned to improving safety performance and reducing potential workplace disasters. Although no universal definition of corporate culture exists, it appears to reflect shared behaviours, beliefs, attitudes, values, organisational goals, functions and procedures. Organisational or corporate culture seems to be the only glue that holds together common values of improving the health and safety performance. Leaders think about the future all the time, they are also responsible constructing a culture in the workplace that promotes safer workplaces and influencing employees to work safer. These principles and characteristics of effective leadership reflect contemporary beliefs and behaviors based on the fact that today's leaders recognise the need to define a vision and mission for success, build trust, share power in effective ways, develop positive relationships, lead by serving first, and build a sense of community within the organisations they support. The ultimate benefit for the employee is that they are actively engaged, engersised, confident about their organisation's health and safety strategy, changes that are occurring, rather than confused and resigned. Employees know what they are supposed to be doing and how that relates to the tasks to that of their colleagues.

Keywords: Safety culture, cultural transformation, leadership behaviour, and safety performance

I. INTRODUCTION

Safety culture has been defined as consisting of shared values (what is important) and beliefs (how things work) that interact with an organisation's structure and control systems to produce behavioural standards (the way we do things round here)¹

The construction industry is a highly hazardous industry and comprises of a wide variety of activities. By implication it also attracts a range of employees who have different levels of skills. Fostering a sustainable safety culture, however, is a company-wide effort that requires commitment and participation from the chief executive to project managers, superintendents, foremen and individual workers on the job site.² That commitment should extend to the selection of subcontractors who also embrace a strong safety mindset and work ethic.

A safety culture of safety starts with leadership, because leadership drives culture and culture drives behaviour. Improving the safety culture in the workplace, in particular the construction industry ,

requires commitment and engaged employees.³ Construction challenges range from variation of sites, location, change of employees and level of skills of construction employees.

A manager's style of leadership and visible demonstration of their commitment to safety through actions is important in shaping the organisation's culture.⁴ The research consisted of literature reviews on safety culture and management leadership towards improving safety performance. The intention of the research is to provide managers with a better understanding of how to strengthen their organisation's safety culture through their own leadership. Developing a safety culture requires a series of continuous process improvement steps can be followed to create a culture where leadership and employee commitment to safety are valued as an integral part of daily operations.⁵

Objectives of the research

This paper is part of a PhD research and it presents literature review related to the safety culture. This paper begins with background of safety issues and safety culture in construction industry. The objectives of this research are:

1. To identify factors involved in the development of safety culture through searching and reviewing previous research.
2. To present the findings of the literature review as a guide to understand the issues and problems in the development of safety culture in the construction industry.
3. To develop safety culture conceptual framework in the construction industry in South Africa

II. LITERATURE REVIEW

A Safety Culture

Safety should be part of the process right from the very beginning. In working toward establishing a safer workplace, construction companies can tap the extensive knowledge of risk management experts who are well versed in their industry. Massey & Walford,⁶ describes the safety beliefs, values and attitudes that are shared by the majority of people in an organisation or workplace ("the way we do things around here") Project planners should also work with their insurers to determine the most effective risk management strategies before a project begins and while it's being built. A safety culture can only be built through management commitment and involvement right from the boardroom to the lowest level of employees.⁷

A poor culture encourages an atmosphere where not complying with safe working practices is acceptable, and it doesn't help the organisation to take effective action to solve health and safety problems. Quite often, organisations that have a poor safety culture can have the same underlying attitude to all process and procedures. This can result in poor product quality and financial control as well as poor health and safety.

Building a safer workplace and industry, requires constant effort and continual improvement, but the result is well worth the investment of time, resources and money. Today more construction companies are retaining a larger portion of the risk through higher deductibles, and can expect to bear significant costs for any accident involving bodily injury.⁸

Culturally, construction remains an industry where employees may feel that taking risks is a part of the job and may worry about what their peers think of those who take extra precautions. The reality is that construction workers are more exposed to workplace injuries because of the inherent dangers of a job that often involves working with large machinery and power tools, often many floors above the ground.

B Leadership indirect influence on safety culture

Specific empirical studies conducted by Barling, Loughlin³ and Kelloway³, Zohar⁹, Kelloway², Mullen and Francis¹⁰ illustrate the significant impact of safety-specific transformational leadership on

safety-related events and workplace injuries. It emerged from these studies that the safety climate facilitates the relationship between transformational leadership and occupational safety. This translates into the manager's behaviour and leadership style towards employees and how it enables a safe working environment.

When a construction company succeeds in building a strong culture of safety, it becomes a core value for every employee. A strong safety culture burnishes the company's reputation, which is one of the most valuable assets for any business, and plays an essential role in its long-term success. In the construction industry management is always under pressure with on going competition to win projects , pricing of projects and the shareholders demands for profits, getting the job done faster and within project timelines places additional risks on employees. ¹¹ In a climate where projects are fewer and clients demanding competitive pricing , building with safety in mind becomes an add on cost to the project. While it may add costs up front, training of employees, induction and orientation , construction safety can potentially save hundreds of thousands of dollars in claims .

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C Leadership in organisational culture

Care should be taken, however, as much foundation building may be needed up front if leadership support, ownership and commitment are lacking; if finding creative and impactful ways to facilitate employee ownership is difficult; or if the organizational culture does not yet support such a change. A supportive organizational culture is essential because of the accompanying generalized trust and value congruence between organizations and their employees (Burns, Mearns & McGeorge, ¹² ; Choudhry, Fang & Mohamed, ¹³ .

The driving forces necessary for Occupational Health and Safety Management System success (e.g., leadership or management commitment, employee ownership, organizational culture), which now need to be measured and tracked, have arcane or esoteric characteristics. In other words, they are difficult to measure.

One of the primary objectives of this dissertation is to explore the added value of shared leadership in terms of predicting team effectiveness. What distinguishes teams from other traditional organizational forms is often the absence of hierarchical authority.

Leadership is presumed to have an effect not just on individuals but also on teams, and sometimes even on entire organizations (Kaiser et al.,)¹⁴ . Leadership enables followers to be motivated and perform, but also small teams to synergize, and organizations to accomplish goals through the differentiated yet synchronized efforts of these individuals and teams (DeChurch et al.)¹⁵ . As such, leadership is an inherently multilevel phenomenon (Dansereau et al. ¹⁶ , Yammarino et al. ,)¹⁷ . Organizational effectiveness hinges on coordinated leadership being enacted from leaders residing within multiple hierarchical levels, whose leadership shapes crucial individual-, team-, and organizational-level outcomes.

Some of the leadership processes that are most likely to add significant value at higher organizational levels however, may involve indirect and systems-wide influence. For instance, middle managers are responsible for managing multiple units, and typically providing direction to managers two or more lower levels apart. Top-level leaders provide system-wide direction and influence, and in many cases never meet all of the followers they influence (Hunt, 1991¹⁸; Jacobs & Jaques, 1987 ¹⁹; Zaccaro,)²⁰ . In this respect, leadership can be conceptualized as leading the organization, which has been studied from a different disciplinary perspective, the strategic management perspective

D Employee Training

Employees can be engaged through a variety of conditions, of which training is one way. Employees need to be trained to properly in the use of a variety of safety equipment, for example fall arrest systems, safety procedures and the need to know the appropriate company rules and regulations. ²¹ At a very minimum, the fall arrest plan, the plan should address each task where a fall exposure exists; the hazard associated with the task; and the controls that will be implemented to mitigate the exposure and the safety training that will be provided to each employee.

III. FINDINGS AND DISCUSSION

What is clear from this research is that creating a safety culture in the workplace contributes to the decline of safety incidents in the workplace, thus impacting the safety performance. One of the most important roles of executives is to set clear expectations for health and safety Performance, they need to at least understand and preferably be visibly engaged in decision making with regards to safety performance evaluation strategies. It should not come as a surprise that in order to transform the culture of the company, management has to set clear parameters and processes, have better technical knowledge of the indicators and measure that are required to create a safety culture in the workplace. Furthermore, top management definitely has a role as it is incumbent on leadership to create opportunities to enhance both the safety and the safety culture in organisations in order to bring about improved safety management. There could be a number of potential reasons behind such a narrow viewpoint. Leadership at various levels within all organisations will change, which will require safety professionals to optimise and complement the overall leadership that drives organisational performance.

IV. CONCLUSION

This study provides compelling evidence regarding the impact that safety leadership exerts on the safety culture in the workplace towards improving safety performance and employee behaviour. To improve the safety culture perceptions in the workplace, it is important that both management and employees are aligned. This supports Zohar's ⁹ findings that increasing the frequency of management – subordinate safety interactions positively influences safety performance.

The study results also show that in construction it is front-line management that has the most influence. Which managerial level exerts the most influence on employee safety behavior is a significant factor not yet fully explored ²², It has been hypothesized that senior managers influence the behaviors of middle managers, who in turn influence the behaviors of front-line managers, who subsequently influence employee behavior ²². The results reported here support this proposition, as managerial influence appears to increase with closer proximity to the workforce.

Future research can have an in-depth focus on investigating the work activities and competencies of top executives in relation to safety performance measurement. On a more practical level, this report suggests that providing guidelines for making the business case for safety culture in the workplace as leading indicators for top-level executives may be of benefit to the workplace at large.

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BIBLIOGRAPHY

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