SAFETY RISK CULTURE AT A COAL LOGISTICS COMPANY: A PERSPECTIVE FROM THE COALFACE

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Abstract:

Achieving zero harm in heavily mechanised industries seems unattainable if a weak safety culture prevails. Embedding safety risk indicators in an organisation strengthens safety culture and improves safety performance. The academic literature focuses on safety culture that acknowledges compliance with safety policies and procedures; it omits another safety risk, however, which, in this study, is defined as perceptions of safety decision-making held by the workforce. Using a questionnaire-based survey for data collection, this study assessed the perceived safety culture at a coal logistics company that for decades has had safety management systems in place. With a 36% response rate from 518 employees, the study surprisingly revealed a misalignment in safety culture between management and non-management, and across departments. This result complements the outcomes of two-yearly self-assessments of safety system compliance, by using a different tool, which concluded that its safety culture was aligned and mature. However, with distribution scores of 4.2 and 3.8 out of 5 for management and non-management, respectively, the overall level of perceived safety risk integration in decision-making remains high. Higher perceptions of integration from functions such as Finance, Engineering, and the Health, Safety, Environment and Compliance departments are evident, compared to Human Resources, Operations and Maintenance, which are less aligned in safety culture. The latter departments are also closer to the coalface with high intrinsic safety risks and prevalence of safety incidents, probably explaining the misalignment and the reason why zero harm is not yet being achieved. Prior interventions resulted in an aligned safety culture between company management and contractor management, with a similar safety risk integration score of 4.2 out of 5. Operations and Maintenance recorded the highest return of "I do not know" responses, identifying areas for improvement. Participants indicated that, to strengthen the safety culture in the organisation, accountability for including safety risk in decision-making, communication, and shared understanding must be improved, prioritising Operations and Maintenance.