Research Statement

Title: Identifying the Determinants of Reduced Dragline Operator Performance Over Time
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Publisher: Australian Coal Industry’s Research Program (ACARP)
Year: 2010

Research Background

The mining of black coal is one of Australia’s most important industries and employs many thousands of Australian workers (both directly and indirectly). The purpose of this research was to investigate factors that may impact the engagement and productivity of dragline operators in the Australian Coal Industry. Draglines are large specialised pieces of equipment valued at over 100 million dollars each and are responsible for uncovering approximately 30% of the coal mined in Australia.

Research Contribution

The key findings from the mixed-methods approach employed for the analysis identified clusters of variables that help to predict a dragline operator’s ability to manage boredom and are related to their job satisfaction. The variables included in the analyses consisted of personal variables, elements of the organisational environment, and the human resource management practices of the mine sites.

Research Significance

The significance of this research is that provides insights into personal factors and organisational variables that impact job satisfaction in a high marginal productivity of labour (MPL) environment. In high MPL industries, small behavioral changes can lead to high relative returns in productivity. The research provides specific strategies that can be used to influence drivers in the model developed. Areas recommended for intervention include improving organisational cultural elements associated with supervision, job involvement, selection and development, and performance management. Training interventions can also be directed at individual workers in the areas of practical intelligence, foresight, situational awareness and how to manage challenge more effectively.