Thematic Analysis of Key Recommendations from Commissioned Occupational Health and Safety Reports in Mining

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Abstract: The objective of the study was to address the recommendations from 10 commissioned occupational health and safety (OHS) reports from the mining industry internationally, spanning the past 50 years. The investigation involved a two-step thematic analysis using Leximancer, a text mining software, to identify the key themes and concepts present in the recommendations. First, Leximancer was utilized to analyze the manifest content of each report through conceptual and relational analysis to produce concept maps. The Leximancer mapping subsystem works in two stages, characterized as semantic extraction of dominant themes, followed by relational extraction [1]. Next, a seeded analysis of the term safety culture was conducted to determine how the concept of safety culture overlaps or diverges from the discussion and recommendations present in the documents [2]. It is evident from the initial analysis that although safety culture was discussed briefly in a few of the documents, it was not a consideration in the formation of the recommendations. Therefore, as results indicate, if the recommendations continue to focus on engineering more solutions for past errors, instead of focusing on the organizations safety culture, they will fail to prevent accidents and fatalities of the future. Applying the findings of this research to OHS in mining, and other industries, such as health care, construction and aviation, has the potential to provide a greater contribution to the prevention of occupational accidents and risk reduction.

Keywords: OHS; Safety Culture; Mining; Leximancer

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