

Improving miner problems with safety research

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In the search for safer working conditions in the mining sector, a recent review <u>published in the International Journal of Mining and Mineral</u> <u>Engineering</u> has highlighted what might become a rich seam for future safety endeavors. The study, which looked at 54 research articles, not only categorizes existing safety measures but also identifies gaps in the existing literature, which could lead to more targeted investigations.

Erik Sundström and Magnus Nygren of the Department of Social Sciences, Technology and Arts at Luleå University of Technology in Luleå, Sweden, have examined closely the various safety initiatives within the global mining industry, uncovering ten important themes. These themes encapsulate the breadth of <u>safety measures</u> covered in the research literature. Foremost among these themes is the cultivation of a safety culture and the promotion of safe behavior among workers. This underpins the significance of fostering a more proactive approach to safety within mining operations worldwide.

However, beyond simply categorizing existing strategies, the work also has the potential to shape how future research is planned and carried out. By homing in on overlooked subjects, such as the influence of societal norms on safety strategies and changes in safety culture, the team offers a guide for more nuanced investigations in the field.

Given that mining operations now increasingly use digitalization and automation, the study emphasizes that there is a need to focus on where <u>technological advancements</u> and worker safety meet.

Understanding how innovations affect safety measures is critical to ensuring the well-being of workers in the face of a rapidly changing industrial landscape. Additionally, the research suggests that there is a need for a deeper examination of how safety practices are shared



efficiently across and among organizations.

The review offers a snapshot of current safety research in the mining sector but also lays the groundwork for advancing the field towards greater protection and sustainability. By addressing overlooked topics and embracing interdisciplinary perspectives, future studies could not only improve safety but also lead to a more sustainable mining industry.

More information: Erik Sundström et al, Understanding the mining safety research field: exploring safety measures and programs in international research, *International Journal of Mining and Mineral Engineering* (2024). DOI: 10.1504/IJMME.2023.137309

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