A Reliable Tool Construction Companies Can Use to Self-Assess Their Safety Climate Maturity

The Safety Climate Assessment Tool (S-CAT): A rubric-based approach to measuring construction safety climate

Tahira M. Probst, Linda M. Goldenhar, Jesse L. Byrd, and Eileen Betit. Journal of Safety Research, 2019.

Overview

Decades of research have shown that safety climate is predictive of workplace safety and safety-related outcomes. However, most construction employers lack the experience and resources to be able to apply this research to their operations. The purpose of this project was to develop and validate a new Safety Climate Assessment Tool (S-CAT) that construction companies can easily use to self-assess their level of safety climate maturity and compare their results to others in the industry. The S-CAT includes text-based (vs. numeric) scales respondents use to answer 37 questions about eight safety climate leading indicators. Construction industry subject matter experts were heavily involved in identifying the 8 indicators and writing the descriptor text for the scales. Nine-hundred and eighty-five (985) construction industry stakeholders completed the online S-CAT and provided their most recent recordable incident rate (RIR). The RIR was used to assess the degree to which the S-CAT results were associated with safety outcomes.

Key Findings

- Input from industry stakeholders resulted in a safety climate measurement tool that reflects the realities of the construction industry.
- The analysis showed that the data best fit a safety climate model that included eight factors or indicators.The eight factors were: “Demonstrating management commitment,” “Aligning and integrating safety as a value,” “Ensuring accountability at all levels,” “Improving site safety leadership,” “Empowering and involving workers,” “Improving communication training at all levels,” and “Encouraging owner/client involvement”.
- A company’s overall S-CAT score was significantly associated with organizational injury rates as measured by the self-reported recordable incident rate (RIR).
- The findings indicate that the S-CAT is a highly reliable and valid tool construction companies can use to self-assess their safety climate maturity.

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See abstract:
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