

Evaluation of training program to improve frontline leaders' safety practices

A training intervention to improve frontline construction leaders' safety leadership practices and overall jobsite safety climate

Natalie V. Schwatka, Linda M. Goldenhar, Stefanie K. Johnson, Marissa A. Beldon, Jamie Tessler, Jack T. Dennerlein, Mark Fullen, Hao Trieu. Journal of Safety Research, 2019.

Overview

Research shows that effective frontline supervisory leadership can positively influence job site safety. CPWR developed the 2.5-hour Foundations for Safety Leadership (FSL) training program to teach construction supervisors five leadership skills they need to strengthen jobsite safety climate and reduce adverse safety-related outcomes. Twenty construction sub-contracting companies were recruited and randomly assigned to either an early or lagged-control training group. Participating supervisors and workers completed surveys at multiple time points before and after the FSL training. Using a quasi-experimental prospective switching replications study design, the authors examined (1) if FSL-trained jobsite leaders would report improved understanding and practice of the FSL leadership skills, safety practices, and crew reporting of safety-related conditions, and (2) if crew members perceived a change in (a) their supervisors' practices, (b) their own safety practices and reporting of safety-related conditions, and (c) overall jobsite safety climate. Linear mixed modelling was used to test changes over time.

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Read the abstract:

<http://bit.ly/2ZpJzAr>

Read more about the FSL:

<http://bit.ly/2m9WR5z> (CPWR report)

<http://bit.ly/2maXA6z> + <http://bit.ly/2kd3qnl> (Key Findings)

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Key Findings

- Compared to the lagged control group, supervisors in the early group reported a statistically significant improvement in their understanding of the leadership skills from immediately before to immediately after training ($\beta = 0.46$ (SE=0.07), $p < .01$), as well as an increase in their use of leadership skills ($\beta = 0.21$ (SE=0.05), $p < .01$) and safety practices ($\beta = 0.22$ (SE = 0.05), $p < .01$) from immediately before to two weeks after training.
- Prior to participating in the FSL training, the only outcome variable that showed a significant mean group difference prior to the training was 'understanding leadership skills'; with the early group having a lower mean score ($\beta = -0.49$ (SE = 0.19), $p < 0.01$).
- Overall, crews reported no significant change in the safety climate from before their supervisors participated in the training to after. Although this could have been due in part to the loss of workers during follow-up surveys.



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