

Does Lean Production Support Safe Construction Worker Behaviors?

Alignment between lean principles and practices and worker safety behavior

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Overview

Lean production principles, viewing worker injuries and illnesses as a form of waste, can support sound occupational safety and health management on the construction site. However, occupational safety and health professionals seek to establish multiple, redundant systems to prevent incidents, in apparent contradiction with lean principles. Researchers examined the literature to identify how lean production management principles aligned with safety management priorities, and tested the findings in a survey of construction professionals.

Key Findings

- Lean production encourages worker involvement in decisions and careful pretask planning, which can positively influence jobsite safety.
- If misunderstood, workers may respond to lean production's emphasis on optimizing performance, reducing production time, and relying on just-in-time delivery by adopting risk-taking behaviors and taking shortcuts to speed production.
- Management must ensure that lean principles are aligned fully with sound safety and health management programs.
- Lean principles and practices must be carefully communicated to construction field staff. It is imperative to communicate the goals of lean construction in terms of how the goals align with safety practices.

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See abstract:

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

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